

ECONOMIC HISTORY OF MANCHURIA

**COMPILED
IN
COMMEMORATION OF THE DECENNIAL
OF THE
ANK OF CHOSEN**

SEOUL, CHOSEN

—
1921

FOREWORD

In many respects Manchuria is as important a field of the Bank of Chosen as its homeland Chosen itself. Ever since its entry into the country so constant and steady has been the progress of its business that to-day it has more branches there than it has anywhere else, and its status is now very similar to that held by it in Chosen—that of the central bank. Naturally we, who thought it fit to compile the economic history of Chosen as a means by which to commemorate the decennial of the bank, have, for the same reason, thought it well to compile a similar book for Manchuria also. The outcome is the present work.

We have further been encouraged in this attempt by the growing intimacy in the trade relations between Manchuria and the countries of the West, which makes the knowledge of it all the more valuable, and therefore welcome, to our Western friends and customers to whom this book is to be presented as a souvenir of the occasion.

Great difficulty has been met with in the compilation of this work owing to the lack of reliable information and statistics on Manchuria, and, though the best has been done with the material available, our accounts are far from being as satisfactory as we could wish them.

This book, as the others of the series, is written by Mr. T. Hoshino, who, in addition to his knowledge of the

country and of the English language, has an additional qualification as the author of this memorial work in that he has been on our staff ever since the establishment of the Bank.

Our thanks are due to the local Chinese authorities, Kwantung Government, South Manchuria Railway Company, and the Chinese Maritime Customs, whose publications have been freely used and referred to in the book, and also to Mr. G. R. Frampton who has read the manuscript with sympathetic interest.

S. MINOBE,

Governor of the Bank of Chosen

Seoul, May, 1920.

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¹ Newchwang (牛莊).

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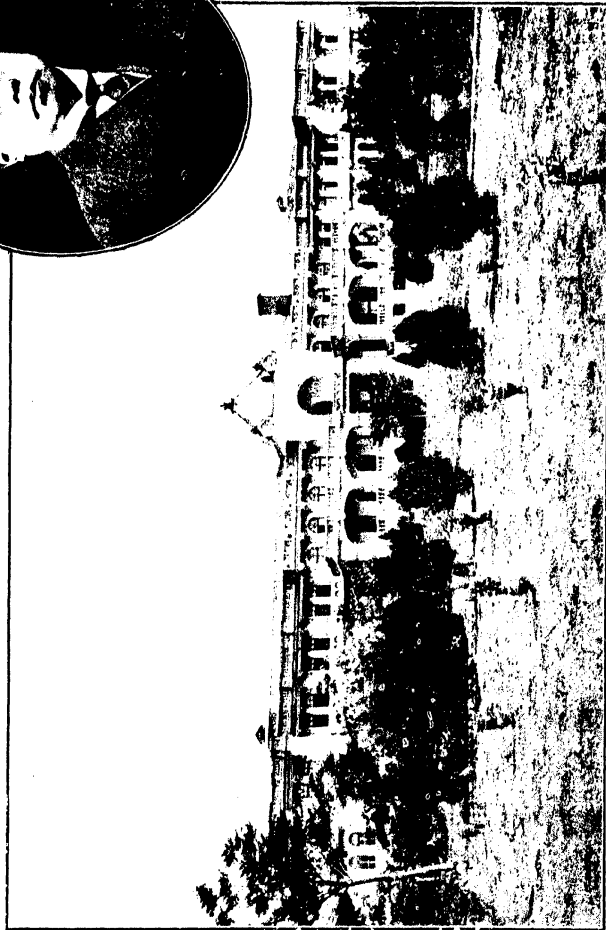
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ECONOMIC HISTORY
OF
MANCHURIA

Mr. I. Yamagata.
Governor-General



Kwantung (關東) Government Office

INTRODUCTION

Preliminary remarks ; Situation, Area, and Population ; Geographical features ; Climate ; Race ; Administration ; South and North Manchuria.

Preliminary Remarks :— After leaving the Korean frontier, a day's journey by rail to the west brings the traveller to the south-eastern border of the great Manchurian plain, and what a change greets his eyes ! Here he will doubtless feel, for the first time since landing at the southern end of the Korean Peninsula, the vastness of the continent. Instead of the endless chains of hills and mountains, with small patches of farm land lying between, which constitute the chief feature of the Korean scenery, especially of those regions traversed by the trunk line, he will here see an immense expanse of cultivated field extending from horizon to horizon. He will notice that the soil is apparently richer, and the houses, though as dirty, are built more solidly than those in Chosen, showing that the people are better off. Nor will a close observer fail to notice a great difference in the character of the men inhabiting this part. In the fields through which the train passes he will notice few lookers-on, few smokers ; on the contrary, he will see everybody busy at the plough, while in the towns, the drowsiness that so often characterizes a Korean town, gives place to lively markets and streets thronged with busy traders. In every

respect he is now in a different land. No less a difference marks the course of the economic development of the two countries, and in this lies the reason for treating Manchuria in a manner different from that employed in speaking of Chosen.

In our treatment of Chosen we divided what we had to say into "Economic Reconstruction" and "Economic Development," because Chosen had to be reconstructed, politically and economically, in order to put her on the way to development. Evils had her in their grip so completely that nothing could be done in the way of improvement unless everything was thoroughly overhauled and reorganized; hence the need of reconstruction, and Japan had it in her power to undertake the task. The case is very different with Manchuria. It is part of the Chinese Republic, and Japan could do very little for it outside her leased territory and railway zone, which, to say the least, form but a very small portion of the vast country. If reconstruction has been necessary for its development, no power but China has ever been in a position to undertake it, and the world knows well she has seldom been in a frame of mind to undertake such a thing.

The economic development of Manchuria, remarkable as it is, has come from very different sources from those we have considered with regard to Chosen. The Government has had very little to do with it; it has largely been accomplished by the force of circumstances over which neither Government nor people had any control. Thus the opening by the English of the port of Newchwang,¹ the Russian

¹ Newchwang (牛莊).

occupation of North Manchuria, the Chino-Japanese and Russo-Japanese Wars, the building of railways by Russia and Japan, the founding of such great ports as Dairen¹ and Harbin by Japanese or by Russians, and very many other events and occurrences have done for Manchuria what laws and regulations, teaching and guiding, have effected for Chosen. A study of these events, as well as their causes and effects, contributing so largely to the formation of present-day Manchuria will first occupy our attention in this work, followed by, as in the case of Chosen, a sectional treatment of the various branches of the economic activity of the country.

Another matter to which we wish to call the attention of our readers at the outset is the difficulty we have met with in collecting reliable statistics with regard to that country. The best, however, has been made of those obtainable, though our accounts in that respect are far from being as satisfactory as we could wish them.

Situation, Area, and Population:—Though the name of Manchuria is very familiar to foreigners, it is seldom used by the natives. Nor is the extent of the region which goes by that name clearly defined. Roughly speaking it corresponds with the region which is called by the Chinese *Tungshanhsing*² (Three Eastern Provinces) consisting of Mukden³ Amur,³ and Kirin⁴ Provinces, and in this sense we shall use the name. Thus defined Manchuria extends between

¹ Dairen (大連). ² *Tungshanhsing* (東三省). ³ For brevity's sake, Fengtien (奉天) and Heilungkiang (黑龍江) Provinces, as they are called by Chinese, will be designated in this work as Mukden (奉天) and Amur (黑龍江) Province respectively, according to the usage among English-speaking peoples. ⁴ Kirin (吉林).

lat. $38^{\circ} 43'$ and $53^{\circ} 30'$ North, and long. $117^{\circ} 50'$ and $135^{\circ} 2'$ East. It is bounded on the north by Siberia, on the east by Siberia and Chosen, on the west by Mongolia and China proper, and on the south by Chosen, the Yellow Sea,¹ and the Gulf of Chili.²

Its area, too, is not yet exactly ascertained. Nor is the population any more exactly known, though the difference between the statistics compiled by various authorities is not so great as in the case of the area. According to the statistics compiled by the South Manchuria Railway Company in 1916, the whole of Manchuria with its area of 382,632 square miles contains a population of 20,112,100, of which the leased territory of Kwantung³ and the South Manchuria Railway Zone have between them a population of 672,000, including 118,364 Japanese and 376 foreigners. This shows that Manchuria, taken as a whole, is one of the most sparsely inhabited countries in the East, there being only 53 people to the square mile, whereas Chosen, with only half the density of population as compared with Japan, has 199 per square mile, or nearly 4 times as many. But when the individual provinces are taken for consideration a somewhat different showing is made, the density of Mukden⁴ Province being 133 per square mile, which is far greater than that of the Northern Provinces of Chosen where it averages only 45 per square mile. On the other hand, Amur⁵ Province has a density of only 12 per square mile. This distribution of population will serve to show the respective position of each

1 Yellow Sea (黃海). 2 Gulf of Chili (渤海). 3 Kwantung (關東).
4 Mukden (奉天). 5 Amur (黑龍江).

province as regards the degree each has attained in its economic development. The area, population, and density of population in each province, according to the statistics of the South Manchuria Railway Company, are given in the following table :

Province	Area in Sq. Miles	Population	Pop. per Sq. Miles
Mukden ¹	90,225	11,979,400	133
Kirin ²	81,018	5,638,700	63
Amur ³	211,387	2,494,000	12
Total	382,630	20,112,100	53

The Kwantung⁴ Government gives somewhat different figures as follows :

Province	Area in Sq. Miles	Population	Pop. per Sq. Miles
Mukden ¹	84,841	11,782,100	139
Kirin ²	95,733	5,625,895	59
Amur ³	204,715	1,997,622	10
Total	385,289	19,405,617	50

This disparity between the two Japanese authorities on Manchuria may seem strange to those unacquainted with things Manchurian, but, in the face of the total lack of cadastre and census register, both of these authorities, at best, base their figures on conjecture. The statistician of the railway company gives a minute description of the processes by which he arrived at his conclusions, and though we have heard nothing of the kind from that of the Government-General, he has certainly his own explanation. So, avoiding giving a verdict against either party, we shall simply say that both should be taken with due reserve.

¹ Mukden (奉天). ² Kirin (吉林). ³ Amur (黑龍江). ⁴ Kwantung (關東).

Those given by the Chinese authorities are simply ridiculous. For instance, the extent of Chinchow¹ is given thus : length 256 miles (Chinese), breadth 100 miles, area 25,600 square miles. They have apparently multiplied length by breadth and so got the area !

Geographical Features :—Manchuria is traversed from south to north by two large mountain ranges,—Khing² and Changpai³—the one close to the north-western frontier, and the other near the south-eastern boundary. These ranges have peaks which are as a rule from 3,000 to 6,000 feet above the sea-level, while a few of them are as high as 8,000 feet. These ranges send off spurs towards each other, and these come close together in the central regions, so that Manchuria is composed of high mountain ranges on the north-west and south-east, with an extensive plain lying between them opening out towards the south-west, embracing the most fertile lands of Manchuria. The mountainous regions are rich in timber and minerals, especially coal, while through the valleys between the mountain ridges flow many rivers which, besides irrigating the regions they pass through, serve as routes for traffic. The largest of these in the north are the Amur,⁴ the Sungari,⁵ and the Ussuri, while those in the south are the Tumen,⁶ the Yalu,⁷ and the Liao.⁸ Of these the Amur⁴ has the longest course, 2,500 miles, of which 2,000 miles are navigable, flowing for the greater part of it along the frontier line between Manchuria and Siberia. Among the rivers draining the interior of Manchuria the most impor-

1 Chinchow (錦州). 2 Khing (興安嶺). 3 Changpai (長白山).
4 Amur (黑龍江). 5 Sungari (松花江). 6 Tumen (圖們江). 7 Yalu (鴨綠江). 8 Liao (遼河).

tant are the Sungari,¹ the Nonni,² and the Liao.³ The Sungari¹ and Nonni² form one system, as they mingle their waters near Petuna⁴; the latter coming from the northern part of the Khingan Range⁵ in the north-west, and the former from the mountains in the neighbourhood of Kirin.⁶ The Sungari¹ after receiving the waters of the Nonni² flows on through North Manchuria till it empties itself into the Amur.⁷ The river is navigable, main stream and important tributaries combined, for 1,060 miles. The Liao,³ which drains the plains of South Manchuria, has its source in the steppes of Mongolia, and empties itself into the Gulf of Chili,⁸ receiving in its lower course an important tributary, sometimes called the East Liao⁹ to distinguish it from the main stream which is called the West Liao,¹⁰ flowing through the province of Kirin.⁶ This river system is navigable for about 400 miles. These two river systems naturally divide the Manchurian plains into two sections—the northern, or the Sungari¹ plains, and the southern, or the Liao³ plains, forming between them the granary of the whole of Manchuria.

Climate :—The climate is more continental than that of Chosen, and it is greatly affected by the proximity of the great Mongolian desert, the average temperature in January, the coldest month of the year, being—1.6° C. at Dairen,¹¹ —13.7° C. at Mukden,¹² and —14.9° C. at Harbin, and that in July and August, the hottest months, being 23.3° C. at Dairen,¹¹ 24.9° C. at Mukden,¹² and 21.9° C. at Harbin.

1 Sungari (松花江). 2 Nonni (嫩江). 3 Liao (遼河). 4 Petuna (伯都訥). 5 Khingan Range (興安嶺). 6 Kirin (吉林). 7 Amur (黑龍江). 8 Gulf of Chili (渤海). 9 East Liao (東遼河). 10 West Liao (西遼河). 11 Dairen (大連). 12 Mukden (奉天).

Locality	January C	April C	July C	October C
Dairen ¹	— 1.6°	7.6°	23.3°	13.8°
Mukden ²	— 13.7°	6.9°	24.9°	9.3°
Newchwang ³	— 7.2°	7.3°	24.5°	10.5°
Changchun ⁴	— 14.3°	4.4°	23.3°	7.1°
Harbin	— 14.9°	7.7°	21.9°	7.2°

Race.—Little has yet been done towards the anthropological study of Manchuria. The stone implements found in various parts of the country supply us with but meagre information with regard to the people inhabiting it in remote times. That the Chinese made inroad into the country in early prehistoric ages is proved by the earthenware found in the old tombs, and a variety of evidence points to the fact that Chinese influence has been very great from time immemorial. It does not follow, however, that the ancient inhabitants of Manchuria were in any way allied to the Chinese in blood. On the contrary, they belonged to the widespread Tungus race, sharing the same blood as the Japanese, the Korean, and the old inhabitants of the Siberian littoral region.

The inhabitants of the land remained essentially native until about 1644, when the first Manchu Emperor of China removed his capital from Mukden² to Peking,⁵ and caused the larger portion of his race to leave their old home and reside in China. Not only was Manchuria thus deserted by a large portion of its native population, but such was the government policy of that time, nobody was allowed to enter the country save those sent thither to

1 Dairen (大連). 2 Mukden (奉天). 3 Newchwang (牛莊). 4 Changchun (長春). 5 Peking (北京).

collect wild ginseng, or falcon feathers (used for feathering arrows) by government orders. This lasted for about a century. After that period the prohibition began to be relaxed, and the Chinese began to migrate to this vast country. They increased in number as years went by, and now 90 per cent. of the inhabitants of Manchuria are Chinese, the rest being made up of the original Manchus, the Tungus tribes living along the lower reaches of the Sungari,¹ and the Mongols in the Khingan Mountains.² So Manchuria of to-day is not the Manchuria of the Manchus but the Manchuria of the Chinese. The Manchus, who conquered the Chinese by force of arms, were in turn conquered by the latter by the arts of peace.

Administration :—The administrative system of China in Manchuria has undergone frequent changes in recent years. In 1684 a system was instituted by which Mukden,³ Kirin,⁴ and Amur⁵ each had a military governor vested with complete authority, both civil and military. In 1897 the three provinces were placed under a governor-general with a civil governor attached to each. Since 1916 the three provinces have been separately governed, each having a *Tuchun*⁶ (Military Governor) and a *Shengchang*⁷ (Civil Governor). At present, however, these two offices are vested in one person for Mukden³ and Amur⁵ Provinces.

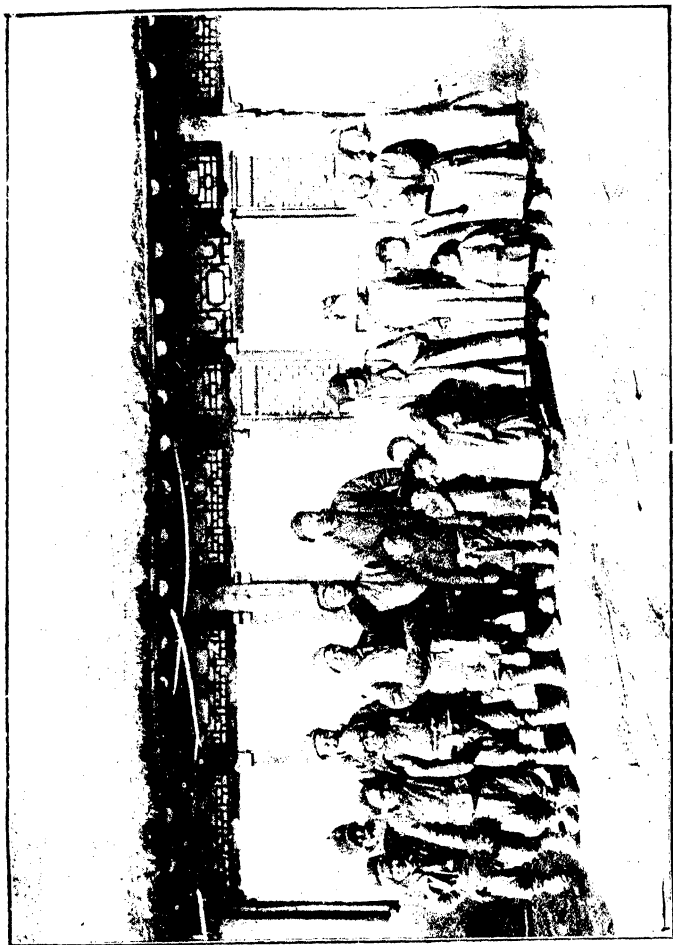
South and North Manchuria :—Mention is frequently made of South and North Manchuria, but, strange as it may seem, no one knows with any exactitude where South Manchuria ends and North Manchuria begins. It was the

¹ Sungari (松花江). ² Khingan Mountains (興安嶺). ³ Mukden (奉天). ⁴ Kirin (吉林). ⁵ Amur (黑龍江). ⁶ *Tuchun* (督軍). ⁷ *Shengchang* (省長).

Russian who first used the terms, but the practical significance of them began when Japanese and Russian influence came in contact in Manchuria, inasmuch as the Russian sphere of influence was represented by the name North Manchuria and that of the Japanese by the name South Manchuria, while additional importance has been lent to the latter term by its finding place in the treaties recently concluded between Japan and China. Several lines of demarkation have been proposed for defining the borders of the two Manchurias according to geographical configuration, but the one considered most in accordance with the popular notion is as follows:

Starting at Hunchun,¹ it takes a north-westerly course, passes along the mountain ridges of Laoyeh,² then goes straight to Hsiushuitientzu,³ proceeds along the Second Sungari,⁴ the Nonni,⁵ and the Taoerho,⁶ and ends at the border of Amur⁷ Province. South Manchuria as thus defined includes the whole of Mukden⁸ Province, together with that part of Mongolia under its jurisdiction, and the southern half of Kirin Province,⁹ comprising in all an area of 136,966 square miles. Speaking generally South Manchuria is served by the South Manchuria Railway and North Manchuria by the Chinese Eastern Railway.

1 Hunchun (琿春). 2 Laoyeh (老爺). 3 Hsiushuitientzu (秀水甸子).
4 Second Sungari (第二松花江). 5 Nonni (嫩江). 6 Taoerho (洮兒河).
7 Amur (黑龍江). 8 Mukden (奉天). 9 Kirin Province (吉林省).



Chinese immigrants in Manchuria

CHAPTER I

ECONOMIC TRANSFORMATION OF MANCHURIA VIS-À-VIS FOREIGN INFLUENCE

Economic condition prior to the entry of foreign influence; Opening of Newchwang¹ and its economic effect; Chino-Japanese War and its economic effect.

Economic Condition Prior to the Entry of Foreign Influence :—The original inhabitants of Manchuria, the Tungus, in which generic term the Manchus who gave the country its present name are included, had little skill in, and no inclination to, agriculture and trade. They were mostly warriors, fishermen, and hunters, who contributed but little to the economic advancement of their country. It was the Chinese immigrants and their descendants that developed Manchuria economically. As early as the Ming² Era (1368-1661), the fertile basin of the great Liao³ already witnessed a considerable number of Chinese colonists engaged in farming, and in some parts of it the lands were cultivated equally as well as in China proper. On the Manchus becoming the masters of China, they did not like to have their birthplace defiled by the subject nation, and forbade the Chinese to immigrate into it. This greatly retarded the economic progress of the country. Towards the beginning of the 18th century the law was relaxed, and

¹ Newchwang (牛莊). ² Ming (明). ³ Liao (遼河).

the tide of Chinese immigration set on foot again. Slowly but steadily the Chinese population of the country increased. They spread themselves first in the fertile valleys in the south, which was nearer to their homes and had a much milder climate, and then pushing northwards settled themselves on those rich plains, so admirably suited to the purpose of tillage, of which Mukden¹ now forms the centre. These immigrants carried with them the advanced knowledge of agriculture, and the intelligence and industry inborn in the great race. Thus the country was opened up by them to agriculture, and, to a certain extent, to trade. Natural traders as the Chinese are, the exchange of their produce of the soil for the manufactured articles of the south was in operation as early as agriculture itself. Their scope of trade was necessarily limited, but apparently it included the provinces of Shantung² and Chili,³ from which they had mostly come. The external trade in those days, it is said, was carried on principally via three routes, the Yalu⁴ in the east, the Liao⁵ in the west, and the Chinchow⁶ Peninsula in the middle, of which three routes that of the Liao⁵ was by far the most important. It is possible that, from the mouths of these rivers, and from the coast of the Peninsula, junks, laden with native products, sailed for the south and brought back in exchange for them the products of more advanced industry. The domestic trade was also extensively conducted, and record has it that the town of Kaiping⁷ was the centre of the silk trade as far back as one hundred years

1 Mukden (奉天). 2 Shantung (山東). 3 Chili (直隸). 4 Yalu (鴨綠江). 5 Liao (遼河). 6 Chinchow (金州). 7 Kaiping (蓋平).

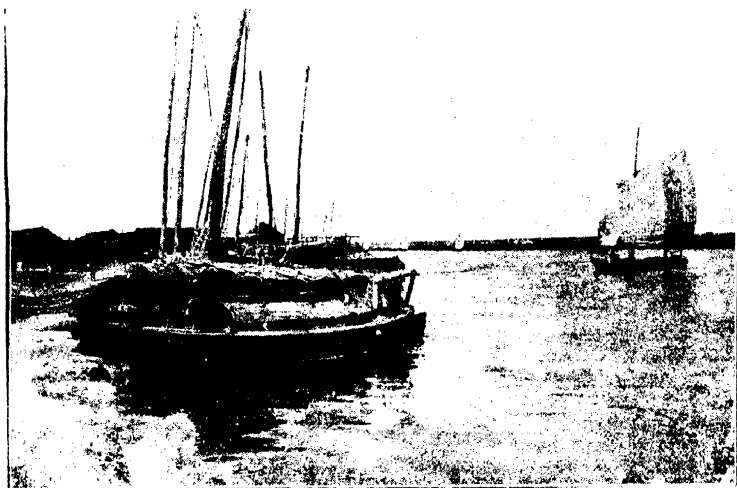
ago. It is here that a great difference is noticed between the economic conditions of Korea and Manchuria. As has been observed, a predominant feature of the Korean economic life was its self-supply system, which ignored the existence of any world outside its own locality, with the result that quite as much cotton was cultivated in the cold north as in the sunny south, thus unprofitably using a large area which could have been worked to much greater advantage by raising wheat. With Manchuria, this has but seldom been the case. Each locality grew only that which could be produced with the greatest advantage, and, what it could not so produce, depended for its supply upon others, and what Manchuria, as a whole, could not so produce was mainly obtained from the more southern provinces of China. It is said that, even in those early days, when commerce on any extensive scale was little known in most other parts of the East, the table of the wealthy Manchurian was loaded with the famous products of all parts of China. For this trade purpose the natural advantages of the country, chiefly in the form of great water-ways, were made use of to a very large extent. As for the Manchus, though they were the master race, they were no match for the Chinese, either in agriculture or in trade. They lived mostly on the grant made by the State, and added but little strength to their native land economically. They had indeed conquered the Chinese by force of arms, but were conquered by the latter by the arts of peace. In this way this vast country, advancing step by step in agriculture and commerce, arrived at the period when a series of events, in which one kind or another of foreign interference

was always present, opened before it a new career, and the first of such foreign interference came from the English, resulting in the opening of the port of Newchwang¹ to foreign trade in 1862.

Opening of Newchwang¹ and Its Economic Effect :—

The port of Newchwang¹ was opened to foreign trade by the Treaty of Tientsin² entered into in 1858, and ratified at Peking³ on the 24th of October, 1860. The port, which is also, and more properly, called Yingkow,⁴ stands on the left bank of the noble Liao,⁵ at a distance of about 14 miles from its mouth. As a matter of fact this was not really the place named in the Tientsin² Treaty, which apparently indicated the old town of Newchwang¹ standing about 50 miles further up the river, but the practical eyes of the British, by whom the port was opened, saw in Yinkow⁴ a more ideal place for trading purposes, so there they established their consulate and called it "Newchwang¹ Consulate," and such was their influence that the place itself came to be called Newchwang.¹ Be that as it may, no better place could indeed have been selected for the establishment of a trading port. What the Yangtze-kiang⁶ is to China, what the Ganges is to India, that was the Liao⁵ to South Manchuria of those days, and to all appearance this new port seemed destined to play a rôle somewhat similar in character to, if not so great as, Shanghai⁷ in China and Calcutta in India. But the great river, which takes its source in the highlands of Mongolia, and winds its way through the most populous and prosperous part of

1 Newchwang (牛莊). 2 Tientsin (天津). 3 Peking (北京). 4 Yingkow (營口). 5 Liao (遼河). 6 Yangtze-kiang (楊子江). 7 Shanghai (上海).



The Liao (遼河)



Newchwang (牛莊)

Manchuria, had great disadvantages as well as advantages. Though navigable for 400 miles, it was so by scarcely anything else but junks on account of the presence of many shoals in its course, preventing the navigation of it by larger vessels—a drawback not so great in those days as it is now, for the small Manchurian trade did not then require any vessels larger than junks. Another great disadvantage lay in its being ice-bound for at least four months in the year (six months in the extreme north). In spite of these drawbacks, however, the Liao¹ was by far the most important trade route, and as such served the whole central and eastern part of South Manchuria. During the months of June, July, and August, therefore, when the water was higher than usual, no less than 10,000, in other seasons 6,000 to 8,000, vessels were said to be floating on its bosom, except in winter when the whole river is frozen hard. These junks, varying in capacity from 7 $\frac{1}{2}$ to 14 $\frac{3}{4}$ tons engaged in the carrying trade, each boat making eight trips on an average during the season, bringing down for export beans, grain, tobacco, hemp, and other produce, and taking back salt, sugar, Chinese produce generally, and foreign manufactures. The port of Newchwang² being located near the mouth of this river naturally had as many drawbacks as the river upon which it depended, yet, being privileged as the sole port in Manchuria open to foreign trade, it was destined, in the absence of any better, to play the most important rôle in the Manchurian trade for fifty years. The progress of the young port in its early days was not however as rapid as it might well have been, due probably

1 Liao (遼河). 2 Newchwang (牛莊).

to the restrictive policy of the Central Government which discouraged the immigration of the Chinese into Manchuria, for the prosperity of Newchwang¹ depended solely on the prosperity of its hinterland, so any policy inimical to the latter could not but affect the former adversely.

Three things contributed preëminently to the prosperity of the port of Newchwang,¹ (1) the bean trade and manufacture of bean cake, (2) the traffic on the Liao,² (3) the passage of coolies.

That the bean trade was from the beginning the chief feature of Manchuria's foreign trade, and in consequence that of Newchwang's, is best shown by the following extract from a publication* of the Maritime Customs of China :

“When the first British Consul of Newchwang,¹ Mr. Meadows, took up his residence there, in 1861, he found the bean trade an ancient and flourishing institution. Yingze — the new Newchwang¹ — had been since 1835 a growing port of shipment for the great coastal trade in beans and bean cake on which Manchuria's prosperity has always depended, and the port was gradually superseding Kaichow and Chinchow.³ River junks capable of carrying 40 tons of grain, and drawing four feet, brought the beans down the Liao² and loaded them into the great sea-going junks which, with cargoes of 100 tons and more, set sail for the coast ports of the southern provinces. The sugar plantation in these sub-tropical regions had for centuries drawn upon the northern bean cake for fertilising, and beans were needed also for the southern mills, where

1 Newchwang (牛莊). 2 Liao (遼河). 3 Chinchow (金州).

* “Soya Beans of Manchuria” published in 1911.

their oil was extracted and used as a substitute for groundnut oil. The earliest available returns for Swatow¹—those of 1860—show that 379,009 piculs of bean cake, valued at \$783,762, and 61,154 piculs of beans, valued at \$107,235, were imported; by 1864, when the first port tables for Swatow¹ were published, the import of bean-cake had increased to slightly over a million piculs, of which half came from Newchwang,² nearly half from Chefoo,³ and a small amount from the Yangze⁴ ports.

“In 1864 the import of beans from Newchwang² to Swatow¹ had risen to more than double that of four years previously, and the other southern ports show similar increases, the trade in foreign bottoms being now in full swing. By the British Treaty of 1858, which opened Newchwang,² the export of pulse and bean cake from that port and from Tungchow⁵ (Chefoo,³) in British vessels, was prohibited; but this prohibition was removed by agreement in March, 1862, and the trade developed with great rapidity. In 1861, the first year in the port's history, only 34 foreign ships visited Newchwang,² but four years later 271—most of which were engaged in the pulse trade—entered and cleared. The diversion of the carrying trade from junks to the speedier sailing vessels, or even steamers, under foreign flags, caused consternation among the owners of the native craft, and efforts were made to revive the prohibitory enactments; but without success, and in 1869 the prohibition, till then in force, against exportation to foreign ports was withdrawn.

¹ Swatow (汕頭). ² Newchwang (牛莊). ³ Chefoo (烟臺). ⁴ Yangze (揚子江). ⁵ Tungchow (登州府).

By that year the extent of the damage done to the junk trade was past repair, for 1,143, fewer native vessels left the port than in 1867."

Of the condition of the bean trade at a later period, the Japanese consular report for 1908 has it that, "the greater part of beans and other pulse, the most important agricultural products in Manchuria, are brought to Newchwang¹ by the waterway of the Liao,² and part is manufactured into bean cake and oil, and part is exported as they are. There are in the port more than 20 bean factories and the annual export of bean cake amounts to 5,200,000 piculs, valued at about ten million yen or eighty per cent. of the whole export." It is apparent from this report that, so recently as 1908, Newchwang¹ was still the greatest bean port in Manchuria, and occupied the position now held by the port of Dairen.³

As regards the passage of coolies, Sir Hosie's work* on Manchuria informs us that "from Chefoo⁴ alone more than twenty-thousand Chinese labourers come to Newchwang¹ every spring by steamer and distribute themselves all over Manchuria and Eastern Mongolia." The consular report (1908) above quoted also says "about 300,000 coolies come to Manchuria every year, and more than half of them pass Newchwang¹ on their way to it and home." The passage of so many people annually, even though poor coolies only, can not have failed to contribute to the prosperity of the port.

¹ Newchwang (牛莊). ² Liao (遼河). ³ Dairen (大連). ⁴ Chefoo (烟台).

* "Manchuria—Its People, Resources and Recent History" published in 1904.

As to the great importance of the Liao,¹ explanation has already been given. It was the Liao¹ that called Newchwang² into existence, it was the Liao¹ that sustained the port through all its vicissitudes, and it is still the Liao¹ that gives it, now that the railways have deprived the port of much of its old-time importance, a position which no other port, however well equipped in other respects, can altogether supplant. The river traffic has always been one of the greatest assets of this first open port of Manchuria.

As the trade returns of the port earlier than 1872 are not available, we give below those following that year down to 1909. Later figures will be given in conjunction with those of other open ports under the heading of "Trade Development."

Year	Number of Ships Entered	Ton- nage Tons	Import of Foreign Goods Hk. Tls.	Import of Chinese Goods Hk. Tls.	Export Hk. Tls.	Total of Imports and Exports Hk. Tls.
1872 ...	258	89,069	2,214,500	1,156,789	2,000,502	5,371,791
1873 ...	208	73,772	2,355,661	835,382	1,582,464	4,773,507
1874 ...	256	90,542	1,639,487	793,648	1,753,543	4,186,678
1875 ...	351	130,675	1,739,920	1,085,455	2,687,680	5,513,055
1876 ...	318	110,640	2,970,355	1,339,446	2,639,324	6,949,125
1877 ...	276	113,533	2,229,994	1,517,142	3,130,449	6,877,285
1878 ...	435	192,571	3,634,398	1,751,449	4,387,116	9,772,963
1879 ...	355	160,021	3,185,794	1,374,083	3,654,737	8,214,614
1880 ...	337	160,867	2,075,862	1,295,803	3,353,371	6,725,036
1881 ...	332	159,098	1,541,288	987,081	3,552,093	6,080,432
1882 ...	316	165,325	1,738,806	1,260,398	3,625,918	6,625,182
1883 ...	326	186,040	1,807,195	1,291,177	3,913,476	7,012,648
1884 ...	282	187,935	2,056,795	1,633,615	4,123,034	7,813,494
1885 ...	316	203,563	2,264,290	1,459,355	4,574,471	8,298,116

¹ Liao (遼河). ² Newchwang (牛莊).

Year	Number of Ships Entered	Ton- nage Tons	Import of	Import of	Export	Total of
			Foreign Goods Hk. Tls.	Chinese Goods Hk. Tls.		Imports and Exports Hk. Tls.
1886 ...	251	160,314	2,447,093	1,627,528	4,526,595	8,601,216
1887 ...	302	208,904	2,745,636	2,133,739	5,477,298	10,356,673
1888 ...	307	210,525	2,681,598	1,597,263	5,686,007	9,964,868
1889 ...	253	192,142	2,204,041	1,678,394	5,567,569	9,450,004
1890 ...	354	267,822	4,449,057	2,801,408	7,197,816	14,448,281
1891 ...	433	334,709	6,050,683	2,934,344	8,059,746	17,064,773
1892 ...	428	331,833	5,165,304	2,130,961	9,065,658	16,362,923
1893 ...	397	296,654	5,548,403	2,801,027	9,310,424	17,659,854
1894 ...	400	297,625	5,343,017	2,543,144	8,532,443	16,418,604
1895 ...	230	186,142	2,465,400	1,283,219	5,605,086	9,353,705
1896 ...	411	332,208	8,112,912	3,381,147	11,277,287	22,771,346
1897 ...	433	365,482	8,995,929	3,554,130	13,808,612	26,358,671
1898 ...	486	413,885	10,577,471	4,415,564	17,448,280	32,441,315
1899 ...	582	503,209	21,775,930	5,965,942	20,615,751	48,357,623
1900 ...	378	312,939	7,732,434	2,822,652	11,569,557	22,024,643
1901 ...	539	470,773	17,056,813	6,463,176	18,742,220	42,262,209
1902 ...	646	538,349	18,185,793	6,981,385	17,524,957	42,692,135
1903 ...	655	590,425	20,319,859	7,330,611	19,981,589	47,632,058
1904 ...	410	349,058	19,241,607	10,116,785	12,159,486	41,517,878
1905 ...	617	498,218	31,003,143	18,718,778	12,030,984	61,752,905
1906 ...	720	636,752	13,720,743	15,971,046	14,790,212	44,482,002
1907 ...	567	525,423	10,587,235	5,995,846	15,711,583	32,294,663
1908 ...	518	531,129	15,151,734	6,438,062	19,609,231	41,199,027
1909 ...	665	697,685	19,172,654	9,918,122	26,082,358	55,173,134

These trade returns show that, during the decade following 1872, the amount of trade did not make much progress, and it was not until after 1882 that it began to increase appreciably ; it was also about this time that the restrictive measures on immigration, which we have mentioned elsewhere as one of the chief reasons for the slow progress of Newchwang¹ during the earlier stage of its existence, were

¹ Newchwang (牛莊).

entirely removed. But the real progress of the port dates from 1895, when the Chino-Japanese War came to an end, while its prosperity reached its zenith in 1905, the year of the conclusion of the Russo-Japanese War. But these aspects will be considered later on when we deal with the economic effects of those wars. The question now to be asked is, what was the economic effect the opening of Newchwang¹ had on Manchuria? It opened, to begin with, this practically forbidden land to the world, in itself a great contribution. Secondly, it opened new markets for the Manchurian produce which resulted in a great development of the entire basin of the Liao.² Thirdly, it gave the Liao² a new importance as the great artery of transport in South Manchuria and East Mongolia, and added prosperity to those riverine towns such as Tienchwangtai,³ Sinminfu,⁴ Tiehling,⁵ and Tungkiangkou.⁶ Lastly, but not least, it enabled Manchuria to enjoy the fruits born to it economically by the two wars above mentioned. Thus it will be seen that, for the first stage of its development, Manchuria is indebted to the ever-enterprising English who opened this first international port, and thus paved the way for the greater development it was destined to attain in after days.

Chino-Japanese War and Its Economic Effect :—The second of the great events that contributed to the economic development of Manchuria was the Chino-Japanese War which broke out in August, 1894. In this case, as in all other cases in which Japan has found herself engaged in war

1 Newchwang (牛莊). 2 Liao (遼河). 3 Tienchwangtai (田庄台).
4 Sinminfu (新民府). 5 Tiehling (鐵嶺). 6 Tungkiangkou (通江口).

with foreign countries. Korea constituted the cause. In the spring of 1894 an insurrection of some magnitude, the *Tonghak* Insurrection,¹ broke out in Korea, and in response to an appeal from the Royal Family, China sent twenty-five hundred men to its aid, and notice was duly given to the Tokyo Government in deference to the Tientsin² Convention, binding each of the contracting parties not to send a military force to Korea without notifying the other. In giving notice of the dispatch of troops, however, China described Korea as her "Tributary State," thus emphasizing a contention which at once created an impossible situation. For nearly twenty years Japan had treated Korea as an equal, in accordance with the terms of the treaty of 1876, and she could not now agree to the Peninsular Kingdom being officially classed as a tributary of China. Her protests, however, were contemptuously ignored, and Chinese statesmen continued to apply the offensive appellation to Korea, while, at the same time, they asserted the right of limiting the number of troops sent by Japan to the Peninsula, as well as the manner of their employment. It should be remembered that the military strength of China was at that time as much over-estimated as that of Japan was under-estimated, and the writer remembers a war between China and Japan being compared to a struggle between a whale and a shrimp. It demanded of Japan, therefore, great nerve and determination to engage in an armed conflict with China, and naturally every possible step was taken by her statesmen to avert the crisis, without, of course, surrendering her claim regarding the

1 *Tonghak* Insurrection (東學亂). 2 Tientsin (天津).

independence of Korea. But the opening fire by three Chinese ships on two Japanese cruisers on the 25th of July, 1894, put an end to all negotiation, and the war began. The result was a complete victory for Japan. In less than a year from the time hostilities were started, Korea and Manchuria were completely occupied by her troops, and Peking¹ was in imminent danger. China sued for peace, and it was signed at Shimonoseki on the 17th of April, 1895. By this treaty, China ceded to Japan "in perpetuity and full sovereignty" the following territories, together with all fortifications, arsenals, and public property thereon :

"The southern portion of the province of Mukden² within the following boundaries :

"The line of demarkation begins at the mouth of the River Yalu³ and ascends that stream to the mouth of the River Anping⁴; from thence the line runs to Fenghuang⁵; from thence to Haicheng⁶; from thence to Yingkow,⁷ the port of Newchwang,⁸ forming a line which describes the southern portion of the territory. The places above named are included in the ceded territory. When the line reaches the River Liao⁹ at Yingkow⁷ it follows the course of that stream to its mouth, where it terminates. The mid-channel of the River Liao⁹ shall be taken as the line of demarkation.

"This cession also includes all islands appertaining or belonging to the province of Mukden² situated in

1 Peking (北京). 2 Mukden (奉天). 3 River Yalu (鴨綠江). 4 River Anping (安平河). 5 Fenghuang (鳳凰城). 6 Haicheng (海城). 7 Yingkow (營口). 8 Newchwang (牛莊). 9 River Liao (遼河).

the eastern portion of the Bay of Liaotung¹ and in the northern part of the Yellow Sea."²

But scarcely was the ink dry upon this agreement than Japan received a joint note from Russia, Germany, and France containing the "friendly advice" to relinquish the permanent possession of the ceded districts of the Liaotung³ Peninsula on the plea that such possession was detrimental to the lasting peace of the Far East, and the advice was accompanied by a great naval demonstration of the Powers concerned. Japan had no choice but to bow to this advice. The Chinese campaign had exhausted her treasury, as well as her supply of war material, and it would have been an act of madness to oppose a coalition of three great European Powers. She showed no sign of hesitation. On the very day the ratified treaty was published, the Emperor of Japan issued a rescript, in which, after avowing his devotion to the cause of peace, he "yielded to the dictates of magnanimity, and accepted the advice of the three Powers." But although the Tokyo Government sought to soften the situation by the *grace* of speedy acquiescence, the effect produced upon the nation was profound.

In November, 1895, a convention for the retrocession of Liaotung³ was signed at Peking,⁴ and all the territories occupied by the Japanese troops in Manchuria were retroceded to China for the consideration of the trifling amount of 30,000,000 Kuping Taels.⁵

It soon became known that Russia was the ringleader in the movement, and the intense resentment of the Japanese

1 Bay of Liaotung (遼東灣). 2 Yellow Sea (黃海). 3 Liaotung (遼東). 4 Peking (北京). 5 Kuping Taels (庫平兩).

people was concentrated upon that Power, while immense national gratitude was felt for the English refusal to join the movement. Both these feelings later found expression in two great events—the Anglo-Japanese Alliance and the Russo-Japanese War.

All traces of the Japanese victory in Manchuria in the form of territorial possessions were thus effaced, but the economic relations created by the war between that country and Japan were not. The rich field of Manchuria and its bountiful products could not escape the notice of the Japanese business men who followed the troops, nor of those at home to whom the conditions of the country were continually made known through various reports, and a trade relation never known before was established between the two countries. Of this, Sir Alexander Hosie, British Consul at Newchwang¹ from 1894 to 1897 and from 1899 to 1900, speaks thus in his useful work on Manchuria: "Very gloomy views were expressed in some quarters as to the commercial future of Manchuria, owing to the invasion and occupation of part of the southern province by Japan in consequence of the war between that country and China in 1894-1895, but these views have been falsified by events, for Japan has become the principal market for Manchurian produce, and she is strenuously endeavouring, and with considerable success, to push her manufactures where she buys so freely. Since the war the trade has actually trebled."

But this expansion of the Manchurian trade as a sequel to the Chino-Japanese War was chiefly due to Japan's

¹ Newchwang (牛莊).

purchases of beans and bean cake, and not to any great extent to increase in import coming from that country. It was found that Manchurian beans could be laid down in Japan at less than it cost to produce the same varieties in that country, where pulse enters largely into the diet of the population, and that bean cake was the very thing to replace fish manure, which had become scarce and dear owing to the dearth of herrings along the Japanese coast. These were exported to Japan in large quantities, and in 1889 her purchases exceeded the total export to South China, which had hitherto been the greatest consumer of Manchurian beans. Japan's position as the purchaser of Manchurian products is shown in the following table :

Distribution of Manchurian Exports Through the
Port of Newchwang,¹ 1898-1899.

Country or Port	1898	1899
	Hk. Tls.	Hk. Tls.
Great Britain	5,415	146
Russian Manchuria... ..	1,601	3,917
Korea... ..	58,524	8,669
Japan	6,684,732	8,091,320
Hongkong ²	432,368	772,792
Other Foreign Countries	15,270	887,700
Port Arthur ³	4,280	3,694
Tientsin ⁴	176,713	202,162
Chefoo ⁵	565,979	728,942
Ichang ⁶	—	197
Hankow ⁷	38,253	21,613
Khinkiang ⁸	1,094	730
Shanghai ⁹	3,498,489	6,549,577

1 Newchwang (牛莊). 2 Hongkong (香港). 3 Port Arthur (旅順).
4 Tientsin (天津). 5 Chefoo (煙臺). 6 Ichang (宜昌). 7 Hankow (漢口). 8 Khinkiang (鎮江). 9 Shanghai (上海).

Country or Port	1898	1899
	Hk. Tls.	Hk. Tls.
Ningpo ¹	8,576	12,114
Foochow ²	2,405	1,010
Amoy ³	1,632,617	1,807,842
Swatow ⁴	3,289,012	3,356,341
Canton ⁵	2,534,275	2,690,053
Total	18,949,602	25,138,819

In spite of this great increase in the export to Japan, the import from that country was still very small. Japan was yet in no position to compete with England, America, and India in that respect. She was strenuously endeavouring, it is true, to push her manufactures there, but it was years later before her endeavours were crowned with success. In cotton goods, which have always constituted the largest item of Manchurian imports, Japan's share was miserably poor, as shown in the following table :

Cottons	1898		1899	
	Pieces	£	Pieces	£
Sheetings :				
American	625,982	310,789	1,101,765	588,674
Indian	9,730	3,930	14,050	6,188
English	15,330	7,520	11,911	6,159
Japanese	260	112	7,810	3,527
Chinese	—	—	34,900	16,223
Drills :				
American	367,916	183,291	584,877	304,601
English	1,650	738	3,870	1,836
Indian	1,695	677	630	284
Dutch	—	—	480	210
Japanese	—	—	395	172
Chinese	—	—	450	208

1 Ningpo (寧波). 2 Foochow (福州). 3 Amoy (廈門). 4 Swatow (汕頭). 5 Canton (廣州).

Cottons	1898		1899	
	Pieces	£	Pieces	£
Jeans:				
American	3,380	1,430	29,630	13,380
English	13,560	5,145	9,250	3,660
Dutch	—	—	1,680	632

But from a Manchurian point of view it does not matter from what country purchase is made; the important point is that its trade was trebled by the war, and in especial a great market outside China was found for its beans and other produce, for in such a new country, rich in unused resources, increase in demand always means increase in production. As a matter of fact, agriculture began to be conducted on a much larger scale and to push its way further into the interior, and the farmers, unable to utilize the land they had taken up to the full, came to depend largely upon hired labour, causing, as previously noted, a large amount of labour to be yearly imported from the northern provinces of China, especially Shantung¹ and Chili.² These labourers generally came in the spring and returned to China after the crops had been harvested, but some undoubtedly settled down permanently, and helped to swell its population. Thus dawned a new period for Manchuria, not only in trade but also in agriculture.

1 Shantung (山東). 2 Chili (直隸).



General Chang Tsolin (張作霖),
Military Governor of Mukden (奉天) Prov



CHAPTER II

RUSSIA IN MANCHURIA

Economic development of North Manchuria and Russian Influence; Russian descent on South Manchuria; Manchuria under Russian Domination; Chinese Eastern Railway Company and Russo-Chinese Bank; Russo-Japanese War.

Economic Development of North Manchuria and Russian Influence :—Just as South Manchuria is indebted to the British in its initial stage of economic development, so is North Manchuria to the Russians. Their motives were widely different, as were their policies, the one being commercial, the other military, the one peaceful, the other aggressive. In one thing, however, they must be said to have co-operated, and that was in the opening of Manchuria economically, the British from the South, and the Russians from the North.

The Russo-Chinese agreement of 1860 secured for Russia the whole of the land now called Siberia, and part of her ambition for an outlet on the sea was satisfied by the founding of the great military port of Vladivostok. Along the whole course of the Amur¹ and the Ussuri, which divided her territory from Manchuria, she built a chain of Cossack villages, separated from each other by a distance of 15 to 30 miles, the inhabitants of which were

¹ Amur (黑龍江).

to serve as defenders of the Czar's realm in time of emergency, but otherwise, as peaceful farmers, to exploit the districts in which they were settled. Also towns were built at strategic points on or near the frontier, some of which grew into quite large cities, such as Habarovsk and Blagovestchensk. These towns and villages were exceedingly rich from an Oriental standpoint, being lavishly supported by the Russian Treasury. Regular steamship services, also subsidized by the Government, navigated the Amur¹ and the Ussuri, and other means of transportation and communication opened, even if very imperfectly, regions hitherto completely shut out from the outside world to the sea and to the world at large.

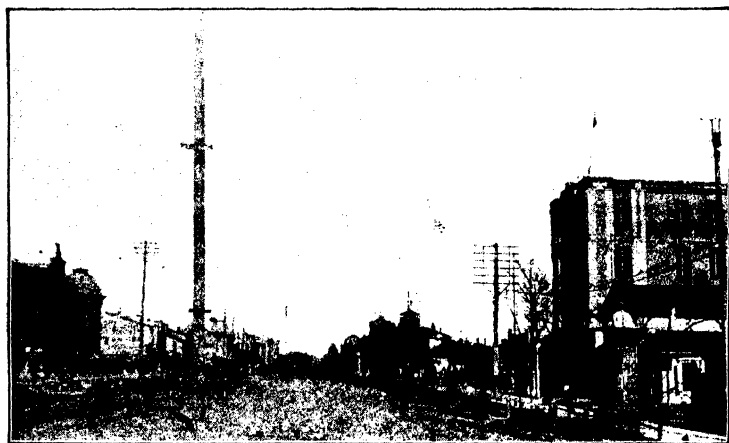
North Manchuria came to have such a neighbour in the latter part of the 19th century. Nor did the Amur¹ and Ussuri separate the domains of the Czar and of the Celestial Empire so effectively economically as they did politically. The Russian immigrants, who were neither good farmers nor good traders, had to depend very largely upon their southern neighbours across the river, the Chinese, for their daily necessities, which fact alone was sufficient to draw large crowds of profit-hunting Chinamen to the frontier districts. The result was that Chinese towns and villages, more or less corresponding in size to the Russian ones facing them across the rivers, were gradually called into being on the southern side of the Amur¹ and the Ussuri, the most conspicuous being the twin towns of Blagovestchensk and Heiho.²

Russian gold, obtained either from the Treasury or

1 Amur (黑龍江). 2 Heiho (黑河).



One of the Cossack villages which line the Siberian
side of the Amur (黑龍江)



Khabarovsk

from mines, of which Siberia has plenty, was exchanged for the produce of the soil or for those imported articles the Chinese traders carried thither to meet the special needs of their Russian neighbours. Thus it happened that, as the development of South Manchuria began from the Liao,¹ that of North Manchuria began from the banks of the Amur.² As a matter of fact, prior to the opening of the valleys of the Sungari,³ most large cities in North Manchuria were found along this river.

So far, however, the developing influence of Russia came from beyond the Amur² and the Ussuri, and was exercised in an indirect way. But the period following saw this influence carried into the very heart of North Manchuria, and at one time, though only for a short period, even to the southern extremity of South Manchuria, penetrating lengthwise the whole of Manchuria.

In 1896, China, still staggering under the effects of the Japanese War, yielded to the demand of Russia, who seized the opportunity thus presented, and permitted the construction of a railway through Manchuria to connect the Trans-Baikal and Southern Ussuri sections of the Siberian Railway. The construction of the great Siberian Railway, which ultimately connected Europe with Eastern Asia, had already been in progress for some years past, and it was originally proposed to continue the line from Stretinsk along the Shilka and the Amur² to Habarovsk, thus keeping it completely within Russian territory. But, through the diplomatic success above referred to, she was now in a position to make a short cut, and to push her

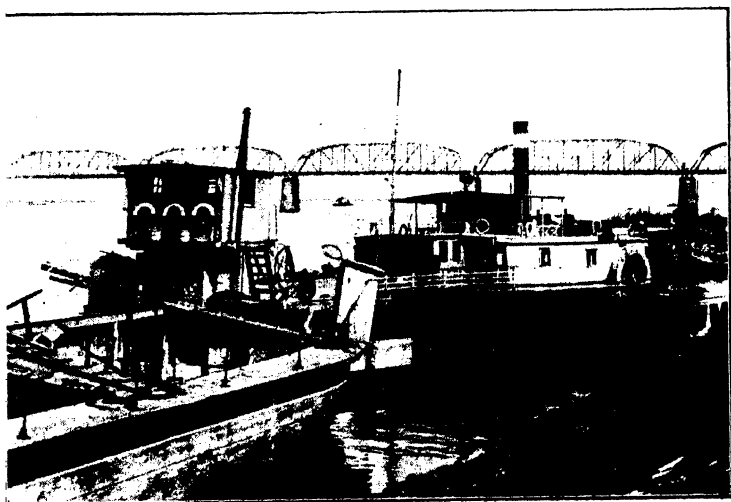
1 Liao (遼河). 2 Amur (黑龍江). 3 Sungari (松花江).

railway direct into the heart of Manchuria and through it to its terminus, the port of Vladivostok, and she had many great reasons to prefer this road to the one originally proposed. The route was shorter and easier, and therefore cost her so much the less. But expense she apparently did not mind much. Apart from her political design, of which we shall speak presently, her first consideration must certainly have been the great natural wealth the country to be traversed was known to possess. The Chinese Eastern Railway, as the railway laid according to this altered scheme was called, was completed in October, 1901. It enters Manchuria at the town of the same name (sometimes called Manchouli),¹ crosses the Great Khingan Mountains,² then traverses the great rich plain, the richest in Manchuria and watered by the Nonni³ and the Sungari,⁴ leaves Manchuria at Pogranitchnaia and enters the Ussuri region of Siberia, the whole length covered being 922 miles. The great changes this penetration of the land by the Russian Railway wrought in the economic conditions of the country traversed by it may well be imagined. The tens of millions of roubles which went into the pockets of the coolies employed in the construction work were doubtless carried by them for the greater part into the provinces to the south from which they mostly came, but there still remained tens of thousands of Russian spendthrifts, officials, civil and military, bankers, and merchants, their wives and children, and a large number of Russian soldiers who were stationed at regular intervals along the whole line. At each station

1 Manchouli (滿洲里). 2 Great Khingan Mountains (大興安嶺).
3 Nonni (嫩江). 4 Sungari (松花江).



Harbin



The Sungari (松花江)

sprang up a Russian colony, and close to it, though with still a respectable distance intervening, a Chinese one, in a way "that outstripped the mushroom growth of 'boom towns' in Western America,"* as the scene is described by an English traveller who passed along the road soon after it was opened to traffic. No doubt the natives suffered a great deal from the atrocious conduct of the Russians, who, as the same traveller describes, "carried dread punishment to any bands of Chinese that resented the invasion." But apparently they, the Russians, paid well those Chinese who "did not resent the invasion", and that developed all the country around.

But the greatest feat accomplished by the Russians, next only to the building of the railway, for the benefit of North Manchuria was the founding of a great city, which later became the centre of their political and economic activity. Located in the middle of the great basin of the Sungari¹ and at the interesection of that noble river and the Chinese Eastern Railway, the two main arteries of North Manchurian commerce and trade, Harbin, as the city is called, is built on a site that would naturally be selected for a capital city, while additional importance is given it because of its being the junction of the above line with the branch line running to South Manchuria, a description of which we have purposely omitted in order to avoid complication.

Of the early days of Harbin we know of no better picture than that depicted in Mr. Frazer's "Real Siberia,"

* "Real Siberia" by Mr. Frazer.

¹ Sungari (松花江).

from which we have taken the liberty of quoting twice before. It says :

"But New Harbin, where the Russians are, is for all the world like a 'boom' American town. It has sprung into existence in a few years. Big stores and hotels are being pushed up, and everywhere building is to be seen. Fortunes are made by men who have got patches of land centrally situated.

"Theoretically this is Chinese territory, and therefore goods coming in from the sea at Dalny¹—Talienwan² on our English maps—pay no duty.

"But you do not buy them cheaper at Harbin because of that. Indeed, everything costs about double what it does at Vladivostok. Two hundred per cent. is the profit a trader must make, or he thinks he is doing bad business.

"Harbin is now the principal town in Manchuria. It is a magnet to all the adventurers in Russia. There are two or three murders every week. Respectable folks who go out at night do so in bands, the men armed, and with a Cossack guard.

"Russian officers, and the army of engineers engaged on the railway—they are all excellently paid to stimulate them to hurry the line to completion—make for Harbin when they get a few days' leave. A Russian's idea of good-fellowship, when in his cups, is to squander, to pour champagne on the floor, just to show he doesn't mind expense, to light his cigarette with a three-rouble note, and generally splash money round.

1 Dalny (青泥窪). 2 Talienwan (大連灣).

"There is a *café chantant* at Harbin, which has the laxity of *cafés chantants* in other parts of the world. The night before I was at Harbin, an engineer arrived, his pockets bulging with roubles, and he showed his idea of money by making all the girls sit in a row while he poured champagne on hundred-rouble notes, and then stuck these notes (£10) on the foreheads of each of the eight girls. That is the Harbin idea of having a good time."

After having said what he has to say of the Russians in Manchuria, he adds: "And there is this thing to be said in favour of the Russian occupation (of Manchuria); before the Russians came it was little more than a sterile waste; now money is poured into the country, and another ten years will probably reveal wonders." When an Englishman or a Japanese of those days spoke well of the Russians, what he said was always true. The wonders revealed themselves before the ten years had passed.

A marvellous development was soon in evidence all along the railway and especially around Harbin. Lands hitherto lying waste were taken up and cultivated, and production increased by leaps and bounds.

It was reported by the Russian military authorities that, during their war with Japan, more exactly from February 14, 1904, to October 14, 1905, the Russian armies consumed in the aggregate 66,438,000 pood (2,396,418,660 lbs.) of food-stuff and forage, of which 56,390,000 pood (2,033,987,300 lbs.) or 85 per cent. was supplied by native products—largely North Manchurian

products. The Chinese farmers had at least so much to spare for foreign armies.

Nor were the Chinese merchants, shrewd traders as they are, slow to avail themselves of the excellent opportunities offered them, and before one was aware of it, the real power in commerce was found gravitating into their hands. Fuchiatien,¹ a native town at a stone's throw from Harbin, which, when the railway was being laid served as quarters for the coolies, grew into a large commercial city more populous than, and as rich and prosperous as, the Russian city. This city of Fuchiatien,¹ which now boasts of a population of above 50,000, is at present one of the wealthiest cities in China. Many other towns sprang up along the railways and have since developed into important commercial centres. Such in brief is the economic transformation achieved in North Manchuria through Russian influence.

Russian Descent on South Manchuria:—Up to this period the Russian operations, military or otherwise, had been confined to North Manchuria, in which no foreign power but Russia was much interested. But now a great drama began to unfold itself in which more powers than one were involved, and diplomacy in its worst phase was given full play by the Government of the Czar. In the spring of 1898 the whole of Japan was astounded by the news that China had been induced to sign a treaty with Russia, which actually amounted to the surrender to Russia of the greater part of the Liaotung² Peninsula—the very peninsula which had once been ceded to her and would have remained

¹ Fuchiatien (傅家甸). ² Liaotung (遼東).

her own but for the interference of the three Great Powers. That peninsula now passed into the hands of one of those very powers from whom the "friendly advice" pleading the permanent peace of the Orient had come.

The treaty in question which was concluded on the 27th of March, 1898, contained the following :

"It being necessary for the due protection of her navy in the waters of North China that Russia should possess a station she can defend, the Emperor of China agrees to lease to Russia Port Arthur¹ and Talienwan,² together with the adjacent seas, but on the understanding that such lease shall not prejudice China's sovereignty over this territory.

"The duration of the lease shall be twenty-five years from the day this treaty is signed, but may be extended by mutual agreement between Russia and China.

"The two nations agree that Port Arthur shall be a naval port for the sole use of Russian and Chinese men-of-war, and be considered as an unopened port so far as the naval and mercantile vessels of other nations are concerned. As regards Talienwan,² one portion of the harbour shall be reserved exclusively for Russian and Chinese men-of-war, just like Port Arthur,¹ but the remainder shall be a commercial port freely open to the merchant vessels of all countries.

"Port Arthur¹ and Talienwan² are the points in the territory leased most important for Russian military purposes. Russia shall, therefore, be at liberty to erect at her own expense forts and build barracks and provide defences at such places as she desires.

1 Port Arthur (旅順). 2 Talienwan (大連灣).

"China agrees that the procedure sanctioned in 1896 regarding the construction of railroads by the Chinese Eastern Railway Company shall, from the date of the signature of this treaty, be extended so as to include the construction of a branch line to Talienwan,¹ or, if necessary, in view of the interests involved, of a branch line to the most suitable point on the coast between Newchwang² and the Yalu River.³ Further, the agreement entered into in September, 1896, between the Chinese Government and the Russo-Chinese Bank shall apply with equal strength to this branch line. The direction of this line and the places it shall touch shall be arranged between Hsu Tajen and the Board of the Eastern Railroads. The construction of this line shall never, however, be made a ground for encroaching on the sovereignty or integrity of China.

"This treaty shall take full force and effect from the date it is signed, but the ratifications shall be exchanged at St. Petersburg."

On the 28th of March, 1898, the day following the signing of the above convention, the Russians occupied Port Arthur,⁴ the leased territory was subsequently defined by a line drawn from Pulantien,⁵ at the head of an inlet on the west coast, to Pitzuwo,⁶ a village on the west coast of the Liaotung Peninsula,⁷ and the neutral zone was determined by a line drawn from the mouth of the Kaichow River south of the district city of Kaiping Hsien⁸ on the west coast to a point on

1 Talienwan (大連灣). 2 Newchwang (牛莊). 3 Yalu River (鴨綠江). 4 Port Arthur (旅順). 5 Pulantien (普蘭店). 6 Pitzuwo (貔子窩). 7 Liaotung Peninsula (遼東半島). 8 Kaiping Hsien (蓋平縣).

the Tayang River¹ and thence along the right bank of that river to the sea and including the village of Takushan² on the east coast.

Russia had now three things to accomplish to give practical value to the concessions she had acquired by virtue of the above treaty, and these were the construction of a line through Manchuria from Harbin in the north to Port Arthur³ in the south, the fortification of Port Arthur,³ and the building of a new port on Talien Bay.⁴ It should be remembered that the accomplishment of these three things meant for Russia the attainment of some of her most cherished desires of centuries standing. She was now in a position to have for herself an outlet to the sea free from ice all the year round ; she could now lodge herself in a point strategical enough to have the whole Far East at her beck ; nor could she have overlooked the economic advantage to be gained by her actual possession of such a rich land as Manchuria, and this economic advantage, she rightly thought, could be secured by establishing a great commercial port on Talien Bay. She pursued her self-appointed task, therefore, in great haste, regardless of expenditure, and the southward branch of the Chinese Eastern Railway was completed by the end of 1902. Port Arthur³ was also quickly fortified.

The building of the new city named Dalny⁵ on Talien Bay¹ seems to have been somewhat delayed, yet there is reason to believe that, by the end of 1902, when through traffic between Harbin and Port Arthur was opened, it had

1 Tayang River (大洋河). 2 Takushan (大孤山). 3 Port Arthur (旅順). 4 Talien Bay (大連灣). 5 Dalny (青泥窪).

already become quite an important town. Never before and never since has Manchuria been so completely under foreign domination as it was in the period of which we are now speaking. Russian power now proved itself irresistible; whatever Russia asked for was sure to be granted. Taking advantage of the Boxer rising which broke out in 1900 she had occupied all the strategical points in Manchuria, and the completion of the railways now enabled her to muster those troops anywhere she liked at a moment's notice. England had her hands full with her own affairs—it was the time of the South African War. Japan was cautious, though popular clamour urging war against such atrocious conduct and so flagrant a violation of international morality was beginning to make itself heard. Germany was content with her share in Kiaochow,¹ and France with her gains in South China.

Describing the situation of Manchuria in those days, the author of "Great Russia," Mr. Wirt Gerrare, wrote in the following strain:

"Manchuria is under Russian rule, and is likely to remain so, although the laws and executive may be actually or nominally Chinese. For all practical purposes the Manchurian territories may be regarded as the complement of eastern Siberia, just as Turkestan, Bokhara and other central Asian States are complementary to west Siberia. Russia will tighten her hold of the newly acquired country, and now could not, if she would, withdraw from the position she has taken up."

Everything went well for Russia, and every opportunity

¹ Kiaochow (膠州).

seemed to favour her enterprise. Thus, by the end of 1902, the Czar's will prevailed in the greater part of Manchuria almost as powerfully as in his own domain.

Manchuria under Russian Domination :—From 1896, when China gave consent to the Russian demand to be allowed to construct a railway line through Manchuria, till 1904, when the Russo-Japanese War broke out, Russia may well be said to have dominated Manchuria to the exclusion of other powers. She did not occupy the whole of Manchuria, but at least she could act there as she pleased, and she actually did act in many instances as she pleased—against the wishes of the local governments, in defiance of the central authorities, and in spite of the repeated protests from foreign powers. How Manchuria fared during this period of Russian domination is a question to which we shall now try to work out an answer.

Let us see, first of all, what Russia did in the way of supplying the country with transportation facilities.

Before the arrival of Russia, Manchuria was totally devoid of modern conveniences for transportation. Within a few years of her coming it was provided with the following railway lines :

Manchouli¹-Pogranitchnaia 992 miles.

Harbin-Port Arthur² 617 miles.

Built in a great hurry, the lines of necessity lacked much to be desired in details, but in the choice of route no happier one could possibly have been made, the main line traversing the country from west to east, the branch line running from north to south, and both meeting at Harbin.

¹ Manchouli (滿洲里). ² Port Arthur (旅順).

No two lines otherwise built could have served the country better. Russia is said to have expended £60,000,000 in constructing roads, bridges, railways, and towns in Manchuria. Of this enormous sum, the greater part must have gone to the railways. This, in itself, was a great contribution.

The economic effect produced by them in North Manchuria has already been expounded, and the reader may be expecting that the same thing happened in South Manchuria. In many respects it was the same, but in equally as many respects it was not. In both cases the railways enriched the districts through which they passed, but in North Manchuria the railway traversed actually virgin land, and in many cases it was the Russians who settled on it first, the natives simply following them. Everybody benefited but none suffered from it. This, of course, could not be the case with South Manchuria, where society was advanced, interests complicated, and every bit of land had some one with a claim thereto. Again, the same sum of money distributed among a few people or among a large crowd will naturally have a vastly different effect. Great as was the amount Russia expended in the construction of her Manchurian railway, its effect was not so conspicuous in the comparatively advanced and populous South as in the primitive North. Nor is this all. From Harbin to the leased territory, a distance of 540 miles, there was not a single work which, either in size or in importance, could stand even the feeblest of comparison with those in Harbin, or in Port Arthur.¹ The road was constructed in

¹ Port Arthur (旅順).

dead haste—said to have been so at the rate of three miles a day. The time required for the work was too short to permit of it producing any great effect on the economic life of the people. This last observation does not, of course, apply to the Liaotung Peninsula.¹

In short, in the rude and primitive North the Russians were masters both politically and economically, at least at the initial stage of its development, whereas in the advanced society of the South, though masters politically they were never so economically. The best proof of this is found in the currency ruling in the two districts. In North Manchuria the Russian rouble became the coin of the realm in the same sense in which the pound sterling is the coin of England, and the yen that of Japan, and to this day the North Manchurians remain users of the rouble. In South Manchuria it circulated very freely indeed during the time of the Russian supremacy, but at no time did it supersede the native currency. It may be questioned, however, why the construction of the railway did not benefit the southerners so much since the transportation facilities provided by the railway must surely have been very great. They became very great indeed in later times, but during the Russian régime those facilities were all but refused to the ordinary people. It is recorded that, during 1903, in which year through traffic between Europe and the Far East was first opened, and which was the only peaceful year Russia had after her completion of the South Manchuria Railway, the number of ordinary passengers from Dalny² amounted to 59,000 (for 1911, the first working year of the South Manchuria Railway

1 Liaotung Peninsula (遼東半島). 2 Dalny (青泥窪).

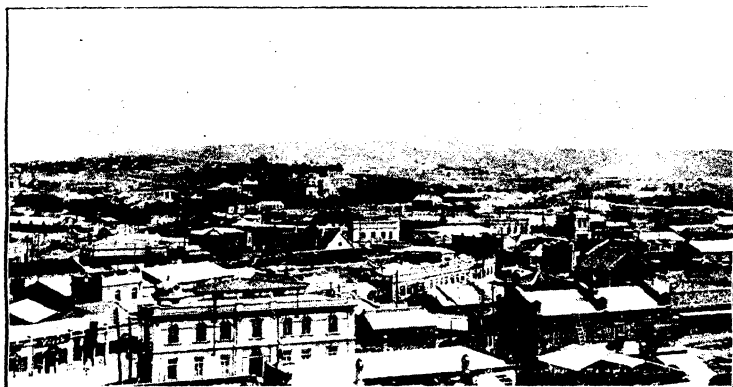
Company, passengers numbered 2,692,627) and that from Port Arthur¹ to 81,000, while the goods forwarded from and received by Dalny² amounted to only 2,734,000 pood (98,615,380 lbs.) and 1,749,600 pood (63,108,072 lbs.) respectively, and those forwarded from and received by Port Arthur¹ to only 1,639,000 pood (59,118,730 lbs.) and 286,000 pood (10,316,020 lbs.) respectively. War clouds were gathering fast in the Far Eastern sky, and Russia wanted to scare them away by a show of military strength. The passage of troops and cannons and other war material more than engaged the whole energy of the single-tracked Manchurian Railway.

Let us now turn our attention to the leased territory of Liaotung³ Peninsula. Russian activity here was of course greater than in the rest of Manchuria, but it was mainly concentrated upon two things, the building and fortification of Port Arthur,¹ and the building of Dalny.²

She found Port Arthur already a fortified town of about 10,000 inhabitants. The fort was, however, so out of date that it required entire reconstruction in order to make it really serviceable in modern warfare. This fort, after the short space of four years, came to be recognized as the strongest of the kind in the Far East, believed even by many to be impregnable. A beautiful European town was also established, in the construction of which the Russian Exchequer defrayed 12,000,000 roubles. According to the statistics made in January, 1903, the port had, old and new town together, a population of 42,060, consisting of 13,583

1 Port Arthur (旅順). 2 Dalny (青泥窪). 3 Liaotung (遼東).

PORT ARTHUR



Old Town



New Town

soldiers and sailors, all Russian, 4,024 Russian civilians, 23,494 Chinese, and 959 foreigners. Great companies and firms, such as the Chinese Eastern Railway Company, the Russo-Chinese Bank, the American Trading Company, Kunst-Albers & Co., Churin & Co., and Mitsui & Co., established offices there, and side by side with these great banking and commercial houses were built hotels, theatres, museums, and parks. A pathetic story is told of a hotel then established. It was erected by the municipality to accommodate foreign dignitaries and city magnates. A magnificent hotel it was when completed, with every comfort of modern life, and designed to be a pleasure-resort of the citizens, but hardly had it been opened a month than the war broke out, and it was converted into a field hospital.

As for Dalny,¹ the Russians produced practically out of nothing a fine city with a population of some 18,000 (the exact number is not known owing to the lack of statistics) during this short period of four years. The building of the city and harbour was entrusted to the Chinese Eastern Railway Company. The work was begun in 1899, and the first stage of it consisted in constructing a harbour at an estimated cost of 10,800,000 roubles, and a city at 2,200,000 roubles, though actually the work is said to have cost something like 30 million roubles. The two wharves which are now called Wharf No. 2 and Wharf "A" were completed before the end of 1902. The city was laid out like a wheel, from the centre of which, then called Nikolaevskaya, radiated ten great streets like so many spokes. The war with Japan broke out just at the moment

¹ Dalny (青泥窪).

when the first stage of the work was finished and the second was about to be begun at an estimated cost of another 10 million roubles, yet the city had already been provided with waterworks, electric works, a good number of fine buildings, and had, as we have said above, a population of about 18,000.

Essentially warlike, the Russians were not altogether unmindful of peaceful work. During the Russo-Japanese War, a letter of General Alexief, Governor of the leased province, fell into the hands of the Japanese soldiers. It was addressed to St. Petersburg Government and contained an urgent request to send him some forestry experts, arguing the necessity of afforesting the country around after the fashion of Kiaochow,¹ and giving information of the steps already taken, including the prohibition of indiscriminate felling of trees, remission of tax on forest lands, free renting of Government lands for afforestation purposes, and distribution of young plants. As a matter of fact, a large number of young plants were found in the nurseries in Port Arthur,² Dairen,³ and Chinchow.⁴ Some attempts were also made to encourage fruit and vegetable growing, fishery, stock-farming, and the manufacture of salt.

Chinese Eastern Railway Company and Russo-Chinese Bank :—To state the facts in historical sequence these two institutions ought to have been treated first and foremost, for it was by the former that the Manchurian railway was built, and it was by the latter that the enormous funds required for its building were provided. But close observa-

1 Kiaochow (膠州). 2 Port Arthur (旅順). 3 Dairen (大連).

4 Chinchow (金州).

tion will reveal that this was by no means necessary, for both of them were but the vaneer under which the Russian Government tried to hide in some measure its own awful name. They were not simply backed by the Government, but were actually run by it.

But whatever may have been their true character, it was under these names that Russia tried to accomplish her "mission" in the Far East, and whatever they may have been in their earlier days they have since developed an individuality of their own, and to-day, though the bureaucracy by which they were established has gone to pieces, these two institutions remain, and are rendering much useful service, each in its own field. It is necessary, therefore, to describe them a little before going farther.

(a) Chinese Eastern Railway Company: The company had its origin in the agreement entered into between the Chinese Government and the Russo-Chinese Bank in September, 1896, in which it was provided that the latter should undertake to form a company, to be called the Chinese Eastern Railway Company, to construct a railway through Manchuria from the town of Chita in Trans-Baikal Province to a point on the South Ussuri Railway. The general terms of the agreement are, that the shareholders of the said company shall be Russians and Chinese only; that the gauge shall be the Russian gauge of five feet; that work shall be begun within twelve months from the issue of an Imperial Decree giving assent to the agreement; that the railway shall be completed in six years from the date on which the land required for the line is handed over to the control of the company; that, on the expiration of eighty

years from the completion of the line and the inauguration of the railway as a going concern, the railway and all railway property shall pass without payment to the Chinese Government, who shall not be responsible for any losses the company may have sustained during that period ; and that the Chinese Government has the right, at the expiration of thirty-six years from the inauguration of the railway as a going concern, to take over the railway on due payment, such payment to include the actual cost thereof, together with all debts and interest thereon, but any surplus, after payment of shareholders, shall be added to the capital account and shall be deducted from the amount to be paid by the Chinese Government.

In accordance with this agreement the company came into being on December 4, 1896, with a capital of only 5,000,000 roubles. Though having so small a capital, it could raise almost any amount by means of loans guaranteed by the Government and issued through the Russo-Chinese Bank. According to Count Cassini, Russia expended over £60,000,000 in the work of constructing roads, bridges, railways, and towns in Manchuria, but undoubtedly a great part of this sum was defrayed through the company and in the name of the company. It may be necessary to note here that the policy of Russia at this time was "to keep everything dark about what she was doing with her temporary occupation of Manchuria" as an English writer said in connection with his travel through Manchuria. We are left in the dark, therefore, about many things of which it might seem to others we ought to have fuller knowledge. In this matter, also, some Japanese books put the total

amount of Russian expenditure in Manchuria at 1,600,000,000 roubles, which, however, is apparently far too much.

The company thus established was unique in many ways. In the first place, it stood outside the control of the Russian Minister of Communications, under whose charge all the rest of her railways were placed, nor was it subjected to the supervision of her Board of Auditors; it belonged direct to the Russian Ministry of Finance. In the second place, the working of the railway formed but a branch of its multifarious activities, though of course it was the most important branch. It undertook mining, river navigation, and ventures into commerce and industry of varied character. It took under its charge the administration of the so-called Railway Zone, including education, hygiene, justice, and even the church. A Japanese publicist called it a "monster," but little did he dream apparently at that moment that a few years later this monster would find its counterpart in a company established by his own countrymen—the South Manchuria Railway Company.

According to the agreement the president was to be a Chinese, to be assisted by a vice-president, a Russian, and the head office to be located both in Peking¹ and St. Petersburg. The president was to stay at Peking¹ to supervise all matters relative to Chino-Russian relations, and the vice-president at St. Petersburg to control the rest of the business. The arrangement was carried out to the letter, but only for the time being. A certain Mr. Hsu Chingteng² was appointed president, and Peking had a head office. "Mr. DeWitte, however," as Mr. Frazer writes "appointed the

1 Peking (北京). 2 Hsu Chingteng (許景澄).

vice-president, all the engineers and officials, and gave sanction to any improvement or modifications. Colloquially the Chinese president was in Mr. DeWitte's pocket." On Mr. Hsu¹ falling a victim to the Boxer rising, no other Chinaman was appointed, and the Peking² head office dropped to a branch one. The gilt was off, and the company came out in its true colours. In earlier days, every year saw a loss to the company, which loss, however, was made good by the Government, the expenditure for maintaining the garrison alone amounting to 10,000,000 roubles, and that for civil administration to 2,000,000 roubles. Since 1911, however, the curtailment in expenditure on the one hand and the increase of profit owing to the transport of soya beans on the other has improved its financial condition, the profit for 1911 amounting to 4,000,000 roubles. For a long time it was presided over by Lieutenant-General Horvath, but in 1916 he was succeeded by Mr. Razinoff, he himself being appointed High Commissioner of Russia for the Far East.

(b) The Russo-Chinese Bank: The Russo-Chinese Bank, the progenitor of the present Russo-Asiatic Bank, was established in December, 1895. Its professed object was to help forward the tradal relations between Russia and China, but it was well known that its true purpose was to act as an agent of Russia's forward policy in the Far East. Mr. Gerrare described it in his "Greater Russia" as an irregular offshoot from the department of the Russian Ministry of Finance, and indeed it was none other. Soon after its foundation it secured from China the right to construct a railway in Manchuria, and established the Chinese

¹ Hsu (許). ² Peking (北京).

Eastern Railway Company. As every student of the financial history of Europe of those days knows, the hundreds of millions which Russia then so freely spent to satisfy her territorial ambition came mostly from France, her ally, and the Russo-Chinese Bank was also backed by a French syndicate, and in particular by the Comptoir National d'Escompte de Paris, one of the largest banks in France. Thus it will be seen that French money also played an important part in the Manchurian development. The years following its establishment saw the bank making a most rapid progress. Its business expanded as the power of Russia expanded, and its network of branches covered well-nigh the whole of Siberia and the Far East, extending even to India and Persia. It waned however as the power of Russia waned. The Russo-Japanese War dealt a great blow to its business, from which it did not recover until the year 1910 when it was amalgamated with the Banque du Nord and renamed the Russo-Asiatic Bank. The Banque du Nord was a Russian bank with its head office in Russia, but this bank also was closely affiliated with the Société Générale pour Favoriser le Développement du Commerce et de l'Industrie en France.

The capital of the Russo-Chinese Bank was originally fixed at 6,000,000 roubles, but was raised by successive stages until it stood on January 1, 1909, a year previous to its amalgamation, at 23,415,000 roubles, without including reserve funds of 5,612,786 roubles. The portion of the capital subscribed by the Chinese Government was 5,000,000 Kuping¹ Taels which, worked out at 6,165,000 roubles, is in-

¹ Kuping (庫平).

cluded in the above capital. On amalgamation the capital was increased to 35,000,000 roubles, and this has since been raised to 55,000,000 roubles.

The business of the Russo-Chinese Bank was, in its statutes, divided into two classes, that in Europe and that in Asia, and its Asiatic business was very comprehensive, including many lines which ought never to be taken up by a bank properly so called. To enumerate these :

1. The purchase and sale of goods for its own account (Art. 14. Par. 2) ;
2. The forwarding by sea, river, and land of goods by vessels and vehicles not owned by the bank (Art. 14. Par. 5) ;
3. The minting of local coin (Art. 14. Par. 10) ;
4. The acquisition of concessions for the construction of railways and of telegraph lines (Art. 14. Par. 10) ;
5. The insurance of goods against fire and other accidents (Art. 14. Par. 12) ;
6. The purchase and sale of immovable property for account of third parties (Art. 14. Par. 13).

We know of no other bank having so extensive a range of business, but it was on account of this extensive range that the bank was able to contribute so much to the development of Manchuria.

Russo-Japanese War :—From the time when the three-power mandate dictated to Japan a cardinal alteration in the Shimonoseki Treaty, many Japanese felt sure that their country must one day cross swords with Russia. The ever-increasing aggressiveness of the Russian policy toward the Far East constantly deepened this feeling until the fire of

irrepressible indignation was rekindled in the entire nation by the practical occupation by the Russians of the Liaotung¹ Peninsula.

Meanwhile, Russia steadily pursued her policy and soon found herself so strengthened in her position in Manchuria that nothing was wanting to establish her as practical mistress of that land except a plausible excuse for garrisoning the place. Such an excuse was furnished by the Boxer rising in 1900. The conclusion of that complication found her in practical occupation of the whole region.

Japan watched all these proceedings with profound anxiety. Once Russia came into possession of Manchuria, her subsequent absorption of Korea would be almost inevitable, and if Korea once came under her sway what would follow? The thought was enough to make every true Japanese shudder. On January 30, 1902, the ever-memorable Anglo-Japanese alliance was signed. Japan was ready to face the colossus of the North single-handed, but was afraid that the other signatories to the joint note would come to her aid; but that fear was now dispersed. Finally, the United States, Great Britain, and Japan, joining hands for that purpose, succeeded in so far stiffening China's back-bone that her show of resolution finally induced Russia to sign a treaty pledging herself to withdraw her troops from Manchuria in three instalments, each step of evacuation to be accomplished by a fixed date. But when the time came for evacuation Russia behaved as though no promise had been given. She proposed new conditions which would have strengthened her hold on Manchuria instead of loosening it.

¹ Liaotung (遼東).

Thereupon, the Tokyo Government fell back on their last means of preserving peace. Appreciating fully the economical status Russia had acquired in Manchuria by large outlays of capital, they offered to recognize that status provided Russia extended a similar recognition to Japan's status in Korea. Russia deferred her answer to Japan's proposal on one pretext or another, and, while she protracted the negotiations to an extent that was plainly contemptuous, hastened to make substantial additions to her fleet and her army in far-eastern Asia. It was impossible to mistake her purpose. The only alternatives for Japan were war or permanent effacement in Asia. She chose war.

We shall not enter into details of this great struggle, but will merely state the following for the reference of our readers. The war commenced on the night of February 8, 1904, with a torpedo attack delivered by the Japanese on the Russian squadron at Port Arthur,¹ and came to an end on the 5th of September, 1905, when a treaty of peace was signed at Portsmouth, U. S. A. Throughout the campaign the Japanese arms were victorious, and, when the day of reckoning came, Russia agreed to recognize Japan's paramount political, military and economic interest in Korea, to transfer to Japan the leased territory of the Liaotung² Peninsula held by Russia from China, together with that of the Russian Railway south of Kwanchengtzu³ (Changchun⁴) and all collateral mining or other privileges, and to cede to Japan the southern half of Saghalien.⁵

The agreement regarding Manchuria was, of course,

1 Port Arthur (旅順). 2 Liaotung (遼東). 3 Kwanchengtzu (寬城子).
4 Changchun (長春). 5 Saghalien (樺太).

subject to China's consent, which was obtained in a treaty signed at Peking¹ on the 2nd of December, 1905. Thus Japan came to hold, in South Manchuria at least, the same position as that held by Russia before the war.

Fought in Manchuria from beginning to end, the war caused much suffering and misery to the country and its inhabitants. The casual destruction of life and property, and the damage to crops and to business were no doubt great, but were, however, greatly modified by the special circumstances attending the war. The Japanese victory was so sweeping in character that the contending armies had hardly time to tarry long in one place. Port Arthur² held out for eleven months, but there the fighting was confined to a very limited space, and was mostly among rock-bound hills. In other places, with the possible exception of the Sha River,³ where the contending armies confronted each other with only the river between them for several months in midwinter, when no farming whatever is possible in Manchuria, it was like a storm passing. In a few weeks farmers were seen ploughing their fields, cattle grazing, and birds singing in the trees as if nothing had happened. It may be said, therefore, without minimizing the misery caused by the war, that it was not so great as the magnitude of the struggle would lead one to suppose.

On the other hand, the war was attended with the usual benefit which a war brings to a third party, and Manchuria was nothing but a third party in this war, though it was fought on its soil. A report of the Chinese Maritime Customs has it that "during the Russo-Japanese War the

1 Peking (北京). 2 Port Arthur (旅順). 3 Sha River (沙河).

vast armies which occupied the whole of South and Central Manchuria depended for their cereal food largely upon the local supplies, and a great impulse was given to Manchurian agriculture." Many Chinese made fortunes out of this war, and some of the native cities date their prosperity from it. We have so far spoken of South Manchuria. The lot that befell the natives in North Manchuria was much more fortunate. There was no battle fought there, hence no damage was occasioned by it, while the people reaped all the benefit the war bestowed upon them.

The development of Harbin during the war was extraordinary. It was made the base of the military operations of the Russian Army. Its civil population rose at a bound to 160,000 and so prosperous was business that the ten-rouble note is said to have actually been the unit of currency. Even more remarkable was the development of the native town of Fuchiatien,¹ and the great and fine buildings now lining its streets were mostly built with the Russian money that was then poured into the pockets of the native merchants.

Nor did the towns of South Manchuria fare badly. The port of Newchwang² reached the zenith of its prosperity. The constant fear on the part of its inhabitants that the port would be ousted from its supreme position in the Manchurian trade by the advent of railways had not been realized under the Russian régime, because of the circumstances already noted. On the contrary, these were the most prosperous years ever experienced by the port. That prosperity reached its record height through the

¹ Fuchiatien (傅家甸). ² Newchwang (牛莊).

Russo-Japanese War, as may be seen from its trade returns given below.

Year				Export Hk. Tls.	Import Hk. Tls.	Total Hk. Tls.
1900	...	...	...	11,569,557	10,555,086	22,124,643
1901	...	...	...	18,742,220	23,519,989	42,262,209
1902	...	...	...	17,524,957	25,167,178	42,692,135
1903	...	...	...	19,981,589	27,650,470	47,632,059
1904	...	...	...	12,159,486	29,358,392	41,517,878
1905	...	...	...	12,030,984	49,721,921	61,752,905
1906	...	...	...	14,790,212	29,691,789	44,482,001
1907	...	...	...	15,711,583	26,583,081	32,294,664
1908	...	...	...	19,609,231	21,589,796	41,199,027
1909	...	...	...	26,082,358	29,090,776	55,173,134

Export decreased to some extent, but the decrease was more than made good by the increase in imports, thus making the two years covered by the war, 1904 and 1905, the record years in its trade annals. The increase in imports was caused by that in war materials and provisions, and no comment need be passed thereon. What is more striking is the comparatively small decrease in its export trade. The exports were mostly agricultural products, the home consumption of which must have greatly increased owing to the presence of large armies. This confirms our view, as well as that expressed in a report of the Chinese Maritime Customs quoted elsewhere, that the war, far from having inflicted damage on Manchurian agriculture as a whole, gave it, on the contrary, a great impetus.

CHAPTER III

MANCHURIA SINCE 1905

Growth of Japanese commercial influence during the Russian period; Establishment of the Government-General of Kwantung¹ Province and the South Manchuria Railway Company; Two Manchurias; Japanese policy in Manchuria; Change in Russian Far Eastern policy; Extension of the Manchurian Railway system; Some railway episodes; Importance of Kwantung¹ Province and growth of Dairen²; Development of South Manchuria Railway Zone.

Growth of Japanese Commercial Influence during the Russian Period:—We have already seen that, in the sequel of the Chino-Japanese War, Japan became the greatest foreign buyer of Manchurian products. The number of Japanese residents in Newchwang³ had increased, and her merchants had come to enjoy no mean place in the international community of that southern port. While all the rest of Manchuria was dominated by the Russians, Newchwang³ alone remained international. Russia kept a garrison in it, but could not monopolize it as she did other places. It was chiefly in that port that the Japanese commercial influence was seen apparently growing during this period, and the Yokohama Specie Bank established a branch there as early as 1900. But political Japan had been completely swept out of Manchuria. She and England

1 Kwantung (關東). 2 Dairen (大連). 3 Newchwang (牛莊).

were looked upon by the Northern Colossus as the irreconcilable enemies of her "mission" in the Far East. Mr. Wirt Gerrare, the author of "Greater Russia," describes how he travelled in disguise through Manchuria when it was under Russian domination, in the course of which he says :

"For political purposes it was thought advantageous to have as many Russian residents in the temporarily occupied province as possible ; at the same time it was deemed expedients to exclude Englishmen and Japanese. . . To be passed into the territory one of two things was necessary : the fiat of the military authority, or a frank by some official of the Eastern-Chinese Railway over the railway line in course of construction. English and Japanese could not obtain either. For people of other nationalities there were no real difficulties."

In spite of all the difficulties placed in her way by the Russian authorities, commercial Japan was slowly but steadily expanding herself in Manchuria. Many of her people entered it anyhow, and her merchants there exerted themselves to extend their business, and their efforts were attended with considerable success. The tide of Japanese emigration abroad had set in ; the post-war boom was gone ; and the subsequent business depression had deprived many of their means of livelihood ; these had to go somewhere to seek their fortune. The author well remembers the day in which schools were sending forth thousands of graduates annually, yet but few of them were able to obtain positions. The author was one of the fortunate few, got a position at a salary of six yen a month ; discontented, he went to America. There were tens of thousands of youths faring

much worse than the author. They had to go abroad willy-nilly. Many went to the United States like the author, to Canada, to South America, and to China, and Manchuria, lying so close to the doors of Japan, was naturally not safe from their peaceful invasion.

Besides, there was in Japan an over-production along all lines of industry—a natural sequence of the unwarranted industrial expansion after the war. The surplus wares had to be disposed of somewhere abroad, and China and Manchuria were made their markets. Soon after his return from America, the author himself was sent to China for this very purpose by a large firm in Tokyo.

Of the difficulty of resisting this economic army of Japan, Russia seems to have been well aware, though her military strength she held in profound contempt. Thus a well-known Russian financier, Professor Migulin, stated in a book published two years before the war that industrial competition between Russia and Japan was impossible. The *Novy Kray*, a semi-official journal published in Port Arthur,¹ stated in 1903: "Our manufacturing trade has no solid ground beneath it. It is checked by two important factors, the competition of Japan, and the inertia of our merchants. It is extremely difficult to contend against Japan, which has occupied all the markets here, and is so near to China and Manchuria. The distance of our factories from the place of outlet greatly increases the price of our products, so that those of the Japanese are sold much more cheaply. Moreover, we cannot organize a credit trade as the Japanese have done, as to do so we

¹ Port Arthur (旅順).

should need to have enormous depôts in Manchuria, which would still further increase factitious prices."

The Russo-Japanese War opened a new prospect before the Japanese in Manchuria. Behind the troops there crowded traders of all sorts, and, at one time during the war, the Japanese population of Newchwang¹ is said to have swollen to some 20,000. They pushed their way into the interior, and there were no longer Russians there to retard their actions.

The military authorities objected in vain to their coming, especially of those having no fixed object, since they caused them much trouble. Such was the rush. On the whole, the Japanese commercial expansion in Manchuria did not cease on account of the Russian domination of the country. It kept growing, not by any special measures taken by the Government concerned, but by the irresistible force of nature.

Establishment of the Government-General of Kwantung Province³ and the South Manchuria Railway Company:—Japan would have been in Manchuria ten years earlier had it not been for the 'Three Powers' intervention and the consequent retrocession of the Liaotung³ Peninsula. As it was, however, she started her career there at the conclusion of the Portsmouth Treaty (September, 1905).

Having obtained the lease of Kwantung Province,² and acquired the whole of the railway lines owned by the Chinese Eastern Railway Company south of Changchun,⁴ together with all the rights, privileges, and properties

¹ Newchwang (牛莊). ² Kwantung Province (關東州). ³ Liaotung (遼東). ⁴ Changchun (長春).

attached to them, Japan now set up the Government-General of Kwantung¹ in Port Arthur² to rule and administer the leased territory, as well as to police the so-called Railway Zone.

The Governor-General, who must be either a general or lieutenant-general, was assisted by a civil governor, who took charge of all the civil affairs in the administration, and by the Chief of Staff, who looked after military affairs. The system, highly savouring of militarism, was after all a very effective one. Surrounded on all sides but one by Chinese Manchuria, where disorder is but a normal condition, peace and good order have always been maintained in the small province of Kwantung,¹ and, with some very rare exceptions, throughout the so-called Railway Zone. The famous mounted banditti and predatory soldiery have withheld their activity from these small portions, and the consequent safety in life and property has constituted one great reason for the economic prosperity enjoyed by them. But Japan did not wish to keep up this kind of government any longer than was absolutely necessary. Recently a change, a decidedly salutary change, was introduced into the system, when Baron Hayashi was appointed as the first civilian Governor-General of Kwantung¹ and succeeded later by Mr. I. Yamagata. A soldier is no longer required to fill the highest position in the Government of Japanese Manchuria.

Simultaneously with the establishment of the Kwantung¹ Government, Japan founded another institution, an economic organ, in the form of a stock company, the South

1 Kwantung (關東). 2 Port Arthur (旅順).

Manchuria Railway Company. The Japanese interests in Manchuria rested largely in the railways and mines ceded to her by Russia, and the company was established to work them.

On June 7, 1906, an Imperial Ordinance was issued concerning the establishment of the South Manchuria Railway Company, and on July 13 of the same year General Viscount G. Kodama was appointed President of the Organization Committee, composed of 80 members. In consequence of the death of Viscount Kodama, which occurred on July 24, Viscount Terauchi, Minister for War, assumed the presidency. On August 1, the Government forwarded to the Committee the conditions relative to the establishment of the South Manchuria Railway Company; and after the formation of the company had been prepared by the Committee, the Articles of Association were approved by the Government on August 18. The first subscription for shares took place from September 10 to October 5, and the establishment of the Company was finally sanctioned by the Minister of Communications on November 1. Thus came into being the South Manchuria Railway Company, the largest company ever founded in Japan, with an authorized capital of Yen 200,000,000, and destined to play the most significant part in Manchurian economic history.

Thus, Japanese Manchuria, as it may be termed for simplicity's sake, had, from the beginning, two centres in that very small territory of Kwantung¹ covering only 218 square miles in all, political and economic, one

¹ Kwantung (關東).

having its headquarters in Port Arthur,¹ and the other in Dairen.² Theoretically one was an organ of the State, and the other a private company, and the former was vested with the power of controlling the latter. So there was nothing irregular. In practice, however, the South Manchuria Railway Company was no less an organ of the State than the Government-General of Kwantung³ itself, in that the economic interests of Japan in Manchuria acquired by an immense sacrifice of life and money were now placed under their charge. Baron Goto, to whom the first presidency of the company was offered, saw the difficulty likely to arise from this complexity of powers, and steadily declined it, and it was only after an understanding was established between him and all those concerned that he accepted the offer. He wanted a free hand, and got it, at least to a considerable extent. Then there was another power in Manchuria, the consuls, under whose jurisdiction were the Japanese communities in native Manchuria, and these officials were of course controlled direct by the Tokyo Foreign Office.

This triple form of Government has evoked much criticism as hindering Japanese activity in Manchuria as a whole. The fact is undeniable. They were often divided among themselves when united action would have produced a better result. To remedy this defect, the governor-generalship and the presidency of the South Manchuria Railway Company were once vested in the same person (1914-1919), but the practice came to an end when the civil governorship was inaugurated to take the place of the military one

1 Port Arthur (旅順). 2 Dairen (大連). 3 Kwantung (關東).

in April, 1919. The system had, however, its merit, for through the mutual check thus exercised there was secured moderation, the limits of which one great power is so liable to exceed.

The Governor-General of Kwantung¹ Province and the presidents of the South Manchuria Railway Company since the inauguration of these offices are given below :

Governor-General :

General Viscount Oshima	...	...	...	1905-1912
General Baron Fukushima	...	...	...	1912-1914
General Baron S. Nakamura	...	...	...	1914-1917
General Baron Y. Nakamura	...	...	...	1917-1919
Baron Hayashi	...	...	...	1919-1920
Mr. I. Yamagata	...	...	...	1920-

Presidents of the South Manchuria Railway Company :

Baron Goto	...	...	...	...	1906-1908
Mr. Z. Nakamura	...	...	...	...	1908-1913
Mr. R. Nomura	...	...	...	...	1913-1914
General Baron Y. Nakamura	...	...	...	...	1914-1919
Mr. R. Nomura	...	...	...	...	1919-

Two Manchurias :—By the establishment of the Kwantung¹ Government and the South Manchuria Railway Company, Manchuria was divided into two parts, singularly analogous to each other. Russia had now retired to the north and a new power took her place in the south, thus giving an additional significance to the terms of South and North Manchuria, the former being applied to the part of Manchuria under the Japanese influence and the

¹ Kwantung (關東).

latter to that under the Russian influence, though no clear line of demarkation has been agreed upon between them. Japan was firmly seated in Kwantung¹ Province with Port Arthur² as the political centre and Dairen,³ the new name given to Dalny,⁴ as the economic centre. Russia concentrated her attention on her own territory of Siberia and on the valley of the Sungari,⁵ the richness of the natural resources of those regions being worth every attention paid them, with Harbin for its political as well as economic centre. She had been deprived of her outlet to the sea in Manchuria, but had the excellent port of Vladivostok in her own territory not far from Manchurian boundary. The all-powerful Chinese Eastern Railway Company had now its counterpart in the South, the all-influential South Manchuria Railway Company, the rights and privileges of the two companies in their respective railway zones, within the limits of which they were masters, being nearly the same.

The annexation of Korea by Japan at a later period has made the condition of North and South Manchuria even more analogous, by making Manchuria the mutual neighbor of both Russia and Japan, and in consequence some of the privileges hitherto extended to the former alone, by reason of her capacity as neighbour, have also been extended to the latter by virtue of the most favoured nation principle.

The two Manchurias have since taken a widely different course in their development, and have often competed with each other in the peaceful warfare of commerce. The two match well in their economic possibilities. The North

1 Kwantung (關東). 2 Port Arthur (旅順). 3 Dairen (大連).
4 Dalny (青泥窪). 5 Sungari (松花江).

has more of natural resources in the form of fertility of soil, largeness of area, especially of arable land, and immense forest wealth, while the South has the advantage of its superior position, its easier access to the sea, and its generally advanced and populous society.

The following table prepared by the South Manchuria Railway Company for 1915 will perhaps be the best index of the relative economic possibilities of the two Manchurias.

		Population	Total Area	Area under Cultivation
			Acres	Acres
South Manchuria	...	14,720,000	86,380,395	14,852,250
North Manchuria	...	4,879,100	163,182,630	7,240,500
Total	... ..	19,599,100	249,563,025	22,092,750

		Ratio of Cultivated to Total Area	Ratio of Cultivated against Arable Land	Cultivated Land per Head of Pop.	Arable Area*
		%	%	Acres	Acres
South Manchuria	...	17.19	72.5	1.01	5,625,600
North Manchuria	...	4.44	52.3	1.48	6,668,850

It will readily be seen that in population South Manchuria is three times greater than the North, while in area the latter is twice as large as the former, and when to this fact is added the consideration that the best farm lands, reclaimed or not yet reclaimed, lie in the North, it will not be difficult to see the great difference existing between the two as to their agricultural future. On the other hand, a glance at the map of Manchuria will show that the North

Remarks:—* By arable area is meant only what may readily be turned into farm lands, the expansion of urban districts, communication facilities, adaptability to immigration, lands to be preserved as pastoral grounds, etc., all being taken into consideration.

has no access to the sea, while the South has at least three good ports, one of which may justly claim to be one of the best ports in the world. In commerce, therefore, the South may be considered as having greater opportunities than the North. A further comparison between them will be made later on.

Japanese Policy in Manchuria:—In taking up her Manchurian campaign Japan upheld three great principles before the world, these were the preservation of China's integrity, the open-door, and equal commercial opportunities for all. These principles were now secured under the shield of Japan. Manchuria was liberated from the Russian yoke after five years of actual occupation, and outside the leased territories and the so-called railway zones complete sovereignty was restored to China. Militarism gave way to commercialism, not only in South Manchuria but also in North Manchuria. No foreign troops other than railway guards were now seen throughout Manchuria. Port Arthur¹ was no longer fortified, but Dairen,² with no fort to protect it, rose into eminence as its commercial capital. Japan made a great blunder in establishing a military government in her leased territory, with a soldier at its head and with its headquarters in military Port Arthur,¹ when a civil form of it would have answered all purposes without incurring, as was the case, the unnecessary suspicion of China and other powers, though such suspicion being more apparent than real was dispersed as time passed. This error was corrected at a later period as we have already seen. One

1 Port Arthur (旅順). 2 Dairen (大連).

thing to be remembered is that the Japanese interests in Manchuria are so great, so out of proportion with those of other nations, owing to her geographical position, her large trade, and her acquired rights, that, unless extraordinary circumspection is exercised in her doings there, she will always be in danger of being grossly misunderstood.

Change in Russian Far Eastern Policy :—Remarkable changes were introduced in the Russian policy in Manchuria as the result of the war. In the first place it was largely commercialized, and there is perhaps no better proof of this than the reforms introduced into the working of the Manchurian Railway, the greater part of which still remained in their hands. The Chinese Eastern Railway had never been a paying concern, and Russia apparently did not care much whether it ever was or not. Mr. Gregor Alexensky states in his "Modern Russia" that "the Manchurian railroad can never pay; as a commercial undertaking it must be counted a useless failure, and the pacific conquest of Manchuria, with the object of creating a new market for Russian Industry, has for the present become impossible."

But at the close of the war Russia seemed to have determined to reform this concern which can never pay into one that would pay.

One of the steps taken for this purpose was to attract as much freight as possible to her own railway at the expense of the one that had passed into Japanese hands. To cite an example, a different freight rate was applied to the same quantity of the same article according as it was shipped northward to Harbin from Changchun¹ or southward from

¹ Changchun (長春).

Harbin to Changchun.¹ A lower one was invariably applied to the former, so that through freight from Changchun¹ to Vladivostok via Harbin was charged practically the same as that from Changchun to Dairen,² whereas in point of distance it was altogether out of comparison. The result was that much of the soya beans produced around Changchun, which is by the way the greatest soya bean field in Manchuria, and which, left to itself, would have taken the southern course to the sea, was attracted to Vladivostok via Harbin. The effect on its finances was what we have already mentioned. Loss was turned into gain, and it was debatable at one time whether, in point of profit, the Russian company was not faring even better than the much-vaunted Japanese company in the South. Apart from the wisdom of thus competing with the southern railway, one thing is clear, that, from the moment of her defeat, a complete change was made in the Russian Manchurian policy. It became pacific and therefore commercial. The great development that the basin of the Sungari³ has since made has been due to no small extent to this peaceful effort of that military power.

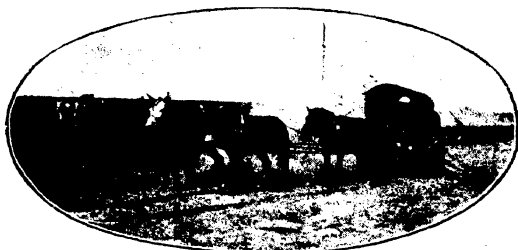
Another of the changes introduced in the Russian Far Eastern policy was in the change of her attitude toward Manchuria. A Japanese writer on Manchuria has said, describing this change, that Russia once doted on her adopted son, Manchuria, but now had learned to her agony that there is no son like a true son, so her love for Manchuria had been transferred to Siberia. The fact is, before the war, the attention of the Russian bureaucrats was so much concentrated upon Manchuria that their own territory of

1 Changchun (長春). 2 Dairen (大連). 3 Sungari (松花江).

Eastern Siberia seemed entirely forgotten, and at times they did not hesitate to sacrifice the interests of the latter for the well-being of the former, a conspicuous instance being her abolition of the free-trade system in Vladivostok (which, however, was re-established at a later period) the moment she established the same system in Dalny.¹ This resulted, as we have seen, in the remarkable development of Harbin and the country around it, from which district was drawn most of the food supply for her army in her subsequent contest with Japan. Had Russia been successful in her Manchurian campaign, this policy would in all likelihood have been pursued with an ever-increasing vigour. As it was, however, she came to realize that Manchuria was after all a foreign country, and, with it, the danger of relying upon a foreign country for her military provisions in time of emergency, when she had resources of her own lying next door of it. She now determined to build a railway across her own territory, and began the construction of the Amur² Railway, which, running parallel to the Chinese Eastern Railway, could not but prove detrimental to the latter's interests. Then again, in 1909, she abolished the free-trade system in her Far Eastern possessions, and began to impose a heavy duty on goods entering them from Manchuria. The blow to the prosperity of Russian Manchuria and especially to that of Harbin was severe and immediate. The city, it is said, almost seemed dead at one time. When the immediate shock of this first blow had passed and the city again began to thrive under the altered conditions, Russia,

1 Dalny (青泥窪). 2 Amur (黑龍江).

regardless of all consequences, was ready to give it a second blow in the form of abolition of the free-trade zone. It should be remembered in this connection that, by virtue of the Russo-Chinese Trade Convention, a zone of 50 versts (33 miles) in breadth on both sides of the frontier was reserved as a free-trade zone, and no duty whatever was charged within these limits by the Customs of either country. The benefit derived from this system by the frontier trade was, of course, very great, and it was even greater after the abolition of the free-trade system in the Russian provinces above referred to. Russia now wanted to surrender to China voluntarily this acquired privilege in her trade after January 1, 1913. The Russians in Manchuria were, of course, as much alarmed as any other peoples, and a strong protest was, it is said, lodged with the central authorities by the Russian Consul-General himself on behalf of the citizens of Harbin. It is not clear whether the central authorities were influenced by these protests, or whether they were worked upon by other causes. At any rate, the abolition did not take place until August, 1914. As to the result this measure might have had, nobody knows, for just then the Great World War broke out, and the fate of both Manchuria and Siberia came to be governed by events and influences far more important than the revision of a treaty provision. All this was undertaken to protect Siberian industry from that of Manchuria. As a matter of fact the Russian flour mills, of which there were more than twenty in and around Harbin, were given special facilities if they removed their mills to somewhere in Siberia.



Chinese carts



South Manchuria Railway car



Dining car of the same railway

Extension of Manchurian Railway System:—Give a Chinaman a good road, a good harbour, and a good market, by which to transport, ship, and sell his products, and he will take care of the rest himself. The furnishing of these facilities to the ever-industrious Chinese population has been the sum and total of the economic policy of Japan in Manchuria.

At the conclusion of peace, there were in Manchuria the following railways:

Russian Lines ceded to Japan:

Trunk Line between Dairen¹ and Changchun² (437 miles);

Port Arthur³ Branch Line (28 miles);

Yingkow⁴ or Newchwang⁵ Branch Line (13 miles);

Yentai⁶ Branch Line (9 miles);

Fushun⁷ Branch Line (28 miles).

Russian Lines retained by Russians:

Trunk Line between Manchouli⁸ and Pograditchnaia (992 miles);

Branch Line between Harbin and Changchun² (152 miles).

Chinese Government Lines:

Shanhaikuan-Hsinmintun⁹ Line (223 miles);

Koupangtzu-Yingkow¹⁰ Line (56 miles).

Japanese Light-railways constructed during the war:

Antung-Mukden¹¹ Line (188 miles);

Mukden-Hsinmintun¹² Line (37 miles).

(This line was ceded to China on June 1, 1907.)

1 Dairen (大連). 2 Changchun (長春). 3 Port Arthur (旅順). 4 Yingkow (營口). 5 Newchwang (牛莊). 6 Yentai (煙臺). 7 Fushun (撫順). 8 Manchouli (滿洲里). 9 Shanhaikuan-Hsinmintun (山海關新民屯). 10 Koupangtzu-Yingkow (溝幫子營口). 11 Antung-Mukden (安東奉天). 12 Mukden-Hsinmintun (奉天新民屯).

Frustrated in their great designs in the Far East, the Russians have since remained inactive, and North Manchuria has not had a single line added to its railways, nor have the conditions of existing lines been much improved. It is solely in South Manchuria that extension and improvement of the lines have been undertaken. Yet, even in South Manchuria, the Russians had laid their lines in such well-chosen parts that no important addition, save for the Antung-Mukden¹ Line, was deemed necessary for the time being, though improvement of the lines and rolling-stock was imperative.

On the acquisition of the above mentioned ceded lines and of the Japanese light-railways in 1907, the first undertaking of the South Manchuria Railway Company was the reconstruction of the ceded lines to the standard gauge of 4 feet 8½ inches, and the doubling of the track between Dairen² and Suchiatun,³ a distance of 238½ miles. These works were finished by 1909, and resulted in a tri-weekly express service being opened between Dairen² and Changchun,⁴ enabling it to connect with every express train of the Trans-Siberian Railway. The reconstruction of the Antung-Mukden¹ Line, originally a light-railway of 2 feet 6 inches gauge and laid by the Japanese Army during the war, was commenced in August, 1909. Passing through, as it does, the most mountainous part of South Manchuria, the work presented a great many difficulties, and it was not until October, 1911, that the whole line of 170 miles, including 24 tunnels, 205 bridges, and 213 culverts, taxing the best engineering skill,

1 Antung-Mukden (安東奉天). 2 Dairen (大連). 3 Suchiatun (蘇家屯). 4 Changchun (長春).

was completed. Thus was opened up, in connection with the Chosen Railway, a new highway round the world via Japan. This is a great addition to the Manchurian railway system, and it is to the presence of this line that the whole region lying to the east of Mukden¹ has been opened up to trade and industry, and that Antung,² a town on the western bank of the Yalu,³ rapidly rose to the second position in Manchuria's foreign trade. The next important addition to the Manchurian railway system was a line (79 miles) connecting Changchun,⁴ the northern terminus of the South Manchuria Railway, with Kirin,⁵ the capital of Kirin⁵ Province, the construction of which was completed in October, 1912. The work was undertaken by the Chinese Government with a capital of Yen 5,300,000, of which Yen 2,150,000 was advanced by the South Manchuria Railway Company. The line remained under Chinese management until the year 1918, but in that year, a new arrangement was entered into between the Chinese Government and the South Manchuria Railway Company, by virtue of which the line was placed under the latter company's management. Apart from the valuable service the line is already rendering in the opening up of the country through which it runs, and of the whole region lying farther back, it has a very bright prospect in that, in the course of a few years, it will be connected with the projected Hoilyong-Kirin⁶ Line, which, in conjunction with the North Chosen Railway, reaches the Korean port of Chungjin⁷ on the Sea of Japan. This will secure another

1 Mukden (奉天). 2 Antung (安東). 3 Yalu (鴨綠江). 4 Changchun (長春). 5 Kirin (吉林). 6 Hoilyong-Kirin (會寧吉林). 7 Chungjin (清津).

outlet for Manchurian products in an entirely different direction from those now existing, and will prove of great benefit to the trade between Manchuria and the northern portion of Japan.

All the lines so far constructed lie to the east of the trunk line, but a departure to this was made when, in July, 1916, a line between Szupingchieh,¹ a town on the trunk line, and Chengchiatun,² the first important town on the highway to Mongolia, was started, and completed in October 1917. This line of 55 miles forms a section of the projected Mongolian line with its terminus at Taonan,³ the largest town in East Mongolia.

Some more lines are projected, and these: Kaiyuan-Hailung,⁴ 120 miles; Hailung-Kirin,⁵ 110 miles; Taonan-Jeho⁶ 470 miles; and, Changchun-Taonan,⁷ 180 miles.

Some Railway Episodes:—Before concluding this chapter of railway extension in Manchuria, it behooves us to cast a passing glance on the series of events which culminated in that memorable American proposal for the neutralization of the railways of Manchuria.

For some time following the Russo-Japanese War the world's eyes were fixed on Manchuria, so that every act of Japan was subjected to an exceptionally rigorous scrutiny. China's mood, too, greatly complicated the situation, and it was during this period that, under the name of a "right-recovery campaign," her people began to protest vehemently against the continuance of any conditions impairing her

1 Szupingchieh (四平街). 2 Chengchiatun (鄭家屯). 3 Taonan (洮南). 4 Kaiyuan-Hailung (開原海龍). 5 Hailung-Kirin (海龍吉林). 6 Taonan-Jeho (洮南熱河). 7 Changchun-Taonan (長春洮南).

sovereignty. But nothing serious happened until the United States entered the arena. The American proposal in question, which was made public on January 5, 1910, was in effect to "take the railroads of Manchuria out of the Eastern politics and place them under an economic and impartial administration by vesting in China the ownership of its railroads; the funds for that purpose to be furnished by the nationals of such interested powers as might be willing to participate and who are pledged to the policy of the open door and equal opportunity; the Powers participating to operate the railway system during the period of the loan and enjoy the usual preferences in supplying materials."

It may well be imagined with what painful feelings the news of this American proposal was received in Japan. It had come from America, whose friendship toward Japan was traditional, whose moral support during her struggle with Russia, and, above all, whose effort in bringing an end to that terrible struggle was still fresh in her memory yet she could do no other than refuse her support to the proposal. The author knows of no instances in which "the Japanese press and many Government officials cried patriotism and Japanese expansionists were outraged and behaved like caged tigers," as is represented to have taken place at that time by an American author whose work on Japan shows that he was anything but friendly to Japan. There were no doubt feelings of resentment in many quarters, but the tone was decidedly peaceful. The sentiment of the Japanese people toward America is best embodied in Count Komura's reply, which we reproduce below at length.

“The relations of friendship and good understanding which so long existed between our two countries, and the common desire of both that nothing may be permitted to weaken the sentiment of mutual good will and confidence, afford, I am happy to believe, ample assurance that a frank exposition of the reasons which prevent my Government from giving their support to the scheme will not be misunderstood or misconstrued.

“The most serious objection to the proposal in question lies in the fact that it contemplates a very important departure from the terms of the treaty of Portsmouth. That treaty was designed to establish in Manchuria a permanent order of things, and the Imperial Government firmly believed that in a strict and loyal adhesion to its provisions are to be found the highest guaranties of enduring peace and repose in this part of the world and of the orderly advancement of Manchuria. Not the least difficult of the many difficult and important problems that were definitely solved at Portsmouth was the question of railways. That adjustment subsequently received the deliberate confirmation of the Chinese Government in the treaty of Peking,¹ and the railway operations now carried on in southern Manchuria are consistent with the original concessions which were with equal deliberation granted by the same power.

“Nor can the Imperial Government see in the present condition of things in Manchuria anything so exceptional as to make it necessary or desirable to set up there an exceptional system not required in other parts of China.

¹ Peking (北京).

There is nothing in the actual situation in that region, so far as the Imperial Government are aware, which exceptionally interferes with the undisturbed enjoyment by China of her political rights. So far as the question of the open door is concerned, the principle of equal opportunity possesses in its application to Manchuria a more comprehensive signification than it has elsewhere in China, since in the virtue of Article VII of the treaty of Portsmouth the Japanese and Russian railways in those provinces are dedicated exclusively to commercial and industrial uses. Finally, in the matter of railway administration, it is impossible for the Imperial Government to believe that the substitution of an international in place of a national régime would prove advantageous or beneficial. On the contrary, it seems to them that in the presence of such a system, economy and efficiency would, in the nature of things, be obliged to yield to political exigencies, and that the divided responsibility of the system would inevitably mean an absence of due responsibility, to the serious disadvantage of the public and the detriment of the service.

“These are the principal reasons why the project under examination does not commend itself to the favourable consideration of the Imperial Government. But there are other cogent reasons which cannot be ignored.

“In the regions affected by the Japanese railways in Manchuria there have been numerous Japanese industrial and commercial undertakings which owed their inception, as they owe their continual existence, to the fact that the Imperial Government, possessing the railways in question,

are able to extend to those enterprises and to the persons engaged in them due protection and defense against attack and pillage by lawless bands that still infest the country. In the development of these enterprises, which are contributing in such a marked degree to the prosperity and progress of Manchuria, a large number of Japanese subjects and large sums of Japanese money are enlisted, and the Imperial Government could not in good faith or with a due sense of their responsibility consent to surrender the means by which such protection and defense are made possible.

"The observations which I have now the honour to present to your Excellency, and which I venture to hope may prove as convincing to your Excellency's Government as they are convincing to my own have reference to the plan in its widest sense, but they are, I should add, no less applicable to the scheme in its more restricted form, since the two plans in principle are the same and differ only in degree."

The question was dropped as suddenly as it appeared.

After, or almost simultaneously with, the question of Manchurian neutralization came the scheme of American capitalists to build the Chinchow-Aigun¹ Railway. Next followed the proposal of the four-power loan of \$50,000,000. But since none of these schemes, loudly discussed as they were at the time, were realized, we perhaps do well to omit going into further details.

Importance of Kwantung² Province and Growth of Dairen³:—Standing at the gateway of Manchuria, Kwan-

¹ Chinchow-Aigun (錦州愛琿). ² Kwantung (關東). ³ Dairen (大連)

tung¹ Province naturally occupies a commanding position in relation to all the other Manchurian provinces. The province consists of a tract of the mainland, with the Gulf of Liaotung² to the west, covering an area of 1,203 sq. miles, and also of the adjacent islands, about 40 in number, with a total area of 95 sq. miles, making an aggregate area of 1,298 sq. miles, or about 34/10,000ths of the whole area of Manchuria. Being so small in extent, with its soil sterile and generally unproductive, its importance is solely derived from its position, and above all from its containing two of the best harbours in Manchuria, Port Arthur³ and Dairen.⁴ The Russians, whose chief purpose in Manchuria was military, took greater interest in the former port, and it was there that their best energy was exerted. To the Japanese, however, whose sole interest is commercial, and whose guiding policy there is one of the open door and equal opportunity to all nations, Port Arthur³ is of little value. As a matter of fact, since the occupation of the province by the Japanese, that famous city and fort has steadily declined in importance, most of the forts remaining as the war left them, while the once prosperous streets show now but few signs of life owing to the lack of commerce. Some enterprising people are thinking of turning the town into a sort of summer resort, taking advantage of its particularly beautiful situation and quiet and clean streets. What irony of fate—to see the once strongest fort in the Orient, in which the great ambition of a great empire was centred,

1 Kwantung (關東). 2 Liaotung (遼東). 3 Port Arthur (旅順).
4 Dairen (大連).

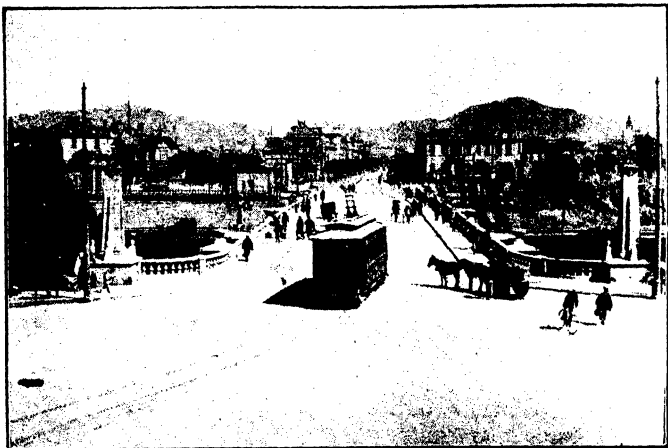
turned into a place of peaceful retirement for the weak and wearied.

The Japanese attention was fixed from the beginning on Dalny,¹ as Dairen² was then called. Strategically it was of little value, but its commercial advantages were great, and this was sufficient for them.

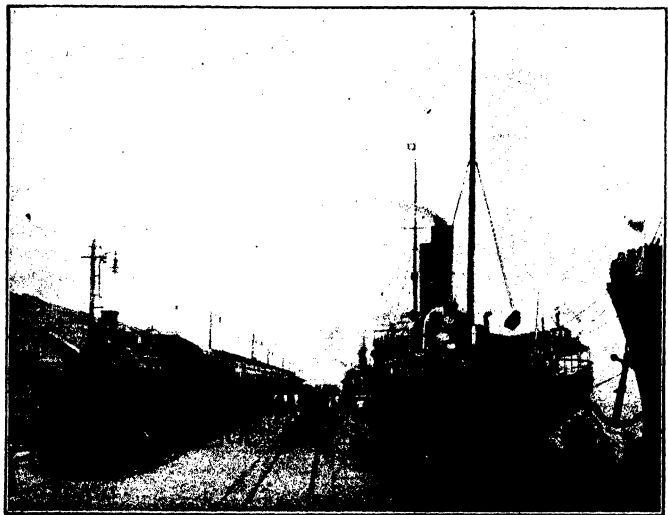
In the early part of the Russo-Japanese War the city fell into Japanese hands without the slightest resistance, but then it was only partly built. The greater part of the constructive work was left unfinished. Immediately after its acquisition the Japanese changed its original name Dalny¹ to Dairen,² and went on enlarging and improving it until, in a few years, the original city built by the Russians formed but a small portion of it and that of no great importance. It now boasts a population of over 70,000 and enjoys the prestige of having risen, since it was declared an open port in 1907, from the 42nd to the 2nd place in the Trade Returns of the Chinese Maritime Customs, and this marvellous progress has been, in a word, brought about by a happy combination of nature and art. On the part of nature, Dairen² has everything to be thankful for and little to complain of; in art, the best has been done by Japan within her financial power. To enumerate some of the advantages possessed by the port :

(a) Its Excellent Harbour: Dairen² Harbour is a natural one, deep and well sheltered, and free from ice all the year round. These natural advantage have been further improved by the construction of breakwaters or a combined length of 12,921 feet the water within them being

1 Dalny (青泥窪). 2 Dairen (大連).



City of Dairen (大連) One of its principal streets



Dairen (大連) Wharves

kept at a depth of 22-30 feet at low tide ; by light-houses, the light of which is visible at a distance of 23 miles ; by a dockyard capable of accommodating vessels of 5,000 tons ; by godowns, with a storage capacity of more than 100,000 tons of cargo ; and by a splendid connection between railway and steamship services. An idea of Dairen¹ Harbour with its various equipments added from year to year may be obtained from the following table :

PRINCIPAL HARBOUR EQUIPMENTS

Year	Length of Bank Revetment		Piers		Covered Sheds and Godowns	
			Number	Length	Number	Area
	Feet			Feet		Acres
1911	...	5,906	2	700	27	23.73
1912	...	7,051	3	2,230	28	23.87
1913	...	8,037	4	2,543	31	25.53
1914	...	8,037	4	1,968	37	27.28
1915	...	8,504	3	1,975	39	29.52
1916	...	8,954	3	1,975	43	30.76
1917	...	9,754	3	1,975	47	40.85

VESSELS ENTERING AND LEAVING AND TONNAGE

Year	Vessels Entering		Junks	Tonnage of Imports	Vessels Leaving		Tonnage of Exports
	Number	Tonnage			Number	Tonnage	
1911	1,752	2,759,248	720	399,571	1,754	2,763,220	1,008,397
1912	1,968	2,994,487	749	468,368	1,969	2,995,376	1,509,519
1913	2,083	3,640,165	860	551,239	2,077	3,626,052	1,809,527
1914	2,280	3,923,025	633	481,504	2,279	3,919,676	2,186,826
1915	2,011	3,267,252	490	566,418	2,013	3,276,918	1,838,461
1916	1,925	3,070,074	63	609,846	1,925	3,069,221	2,124,050
1917	2,072	3,154,581	180	892,041	2,075	3,156,632	2,429,145

¹ Dairen (大連).

(b) Its Ideal Position: About the middle of Kwantung¹ Peninsula where the land shrinks into the narrow isthmus of Chinchow² two projections of land into the Yellow Sea³ enclose the sheet of water known as the Bay of Dairen.⁴ The bay has three smaller inlets, of which the southernmost one is known by the name of Victoria Bay, and it is on this bay that the port of Dairen⁴ (N. lat. 38° 55' and E. long. 121° 40') is situated. Before it open the Yellow Sea³ and the Strait of Chili,⁵ forming between them the highroad to the Gulf of Chili⁶ and of Liaotung⁷ on which Tientsin⁸ and Newchwang⁹ are respectively situated. Behind it lies Manchuria, the whole of which may be reckoned as its hinterland. As a matter of fact, excepting the comparatively small area along the lower reaches of the Liao¹⁰ in the west, and those of the Yalu¹¹ in the east, which are served by Newchwang⁹ and Antung¹² respectively, the whole of South Manchuria, and, since the breakdown of Russia, a considerable part of North Manchuria are served by it. Into this immense hinterland runs the trunk line of the South Manchuria Railway which, in connection with the Antung-Mukden¹³ Line, the Chinese Eastern Railway, the Kirin-Changchun¹⁴ Railway, and the Szupingchieh-Cheng-chiatun¹⁵ Railway, and aided by the great waterways, links the port with practically all the important commercial centres in Manchuria. Herein lies the wealth of Dairen,⁴

1 Kwantung (關東). 2 Chinchow (金州). 3 Yellow Sea (黃海). 4 Dairen (大連). 5 Strait of Chili (直隸海峽). 6 Gulf of Chili (渤海). 7 Liaotung (遼東). 8 Tientsin (天津). 9 Newchwang (牛莊). 10 Liao (遼河). 11 Yalu (鴨綠江). 12 Antung (安東). 13 Antung-Mukden (安東奉天). 14 Kirin-Changchun (吉林長春). 15 Szupingchieh-Cheng-chiatun (四平街鄭家屯).

and nothing attests more plainly to this fact than the figures given below :

Year	Import of Dairen ¹		Export of Dairen ¹		Total	Index Number
	Hk. Tls.		Hk. Tls.			
1907	10,860,835		3,231,145		14,091,980	*
1908	20,276,649		12,411,525		32,688,184	100
1909	17,541,075		26,744,359		44,285,434	132
1910	23,791,834		28,367,974		52,159,808	159
1911	29,786,400		33,730,976		63,517,376	194
1912	34,873,183		28,885,944		63,759,127	196
1913	37,050,545		39,047,742		76,098,288	233
1914	37,894,083		45,105,807		82,999,890	254
1915	41,446,802		48,885,640		90,332,442	276
1916	52,431,366		54,708,247		107,139,613	328
1917	81,965,340		63,187,210		145,152,550	444

* Six months ended 31st December.

(c) Its being Japanese : Last but not least, the prosperity of Dairen¹ as a trading port is due to its being Japanese. The reason is simplicity itself. No people but the English could have made Hongkong² what it is, not because of their immense wealth nor because of their superior ability, but because no people but the English could, at the time of its opening, buy from, or sell to, China as they did. Japan has always been the greatest customer for Manchurian products. Long before there was any Dairen,¹ in the days when the Manchurian trade was practically in the hands of the British merchants in Newchwang,³ Japan was the greatest foreign buyer of Manchurian products. She was not always the largest seller to Manchuria, on the contrary, she sold very little

1 Dairen (大連). 2 Hongkong (香港). 3 Newchwang (牛莊).

while buying very liberally. But by the time Dairen¹ was opened to trade, her position as a seller of manufactured articles to Manchuria compared favourably with that of any other people. Thus, by the opening of Dairen,¹ the greatest customer of, and possibly the destined greatest seller to, Manchuria was brought to its very doors. It was fortunate for both buyer and seller that they were so located, and if China had no option but to lease the port, she certainly leased it to the best party.

Japan's share in the trade of Dairen¹ for 1917 is shown in the following table:

Country	Import		Export	
	Uk. Tls.	%	Uk. Tls.	%
Japan	46,498,947	56	34,123,790	45
China	25,102,691	30	23,044,145	30
America	5,923,146	7	15,919,510	21
Hongkong ²	2,197,001	3	1,072,828	1
Europe	1,103,742	1	1,470,284	2
Others	2,570,817	3	993,145	1
Total	83,396,344	100	76,623,702	100

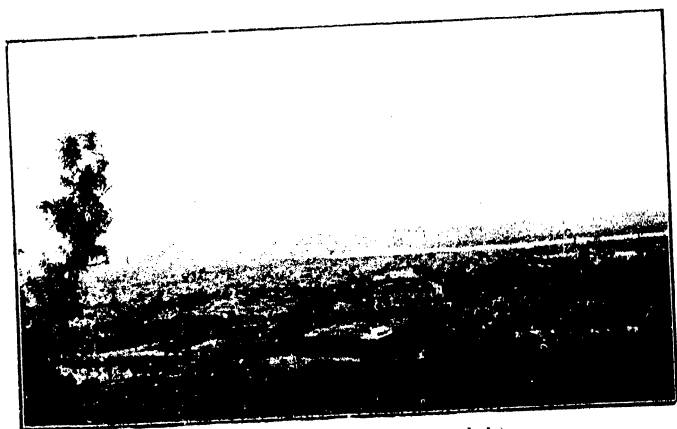
Development of South Manchuria Railway Zone :—

The South Manchuria Railway Zone extends along the whole length of the railway lines owned by the company. It is of necessity only a narrow strip of land, except in certain places where important stations are located, and there it often enough widens out sufficiently so to admit of the building of quite a large town. Thus, in Mukden,³ the land belonging to the zone covers an area of 1,491

1 Dairen (大連). 2 Hongkong (香港). 3 Mukden (奉天).



Railway Town in Mukden (奉天)



Railway Town in Antung (安東)

acres, in Liaoyang¹ 1,479 acres, in Tiehling² 1,531 acres, in Kaiyuan³ 1,499 acres, in Changchun⁴ 1,248 acres, and in Antung⁵ 1,224 acres, while in Dairen⁶ itself an area of 751 acres is allotted to it. Some land, more or less extensive, is allotted to other towns of note making the total area of the zone 30,933 acres. Insignificant in dimensions, considering the vastness of the country, the Railway Zone has acquired considerable importance in relation to Manchuria's economic life, the main reasons for which may be mentioned as follows:

(1) That it passes through the most important commercial centres and the seats of great enterprises in Manchuria.

(2) That it is under Japanese jurisdiction and policed by the Japanese authorities, making it the safest place in Manchuria to live in with regard to life and property.

(3) That it is managed by the South Manchuria Railway Company, which has provided it with all the necessary arrangements for education, public works, hygienic welfare, etc., making it an oasis of physical and mental comfort for those travelling or residing in Manchuria.

Because of these reasons the economic centres are gradually being removed, if not into, at least towards it. In Mukden,⁷ in Changchun,⁴ in Tiehling,² in Antung,⁵ in Liaoyang,¹ in Kaiyuan,³ in fact in every place of any importance along the South Manchuria Railway, the colonies in the Railway Zone are steadily growing in influence, and the parts of the native cities nearest to them are invariably the most

1 Liaoyang (遼陽). 2 Tiehling (鐵嶺). 3 Kaiyuan (開原). 4 Changchun (長春). 5 Antung (安東). 6 Dairen (大連). 7 Mukden (奉天).

prosperous business quarters. But it scarcely need be said that this does not mean the decline of the native cities; far from it, they are all enlivened and growing in importance along with the Japanese quarters. Nor is this all, it supplies the natives with a refuge in troublous times. A report is just to hand that, owing to the feuds between military governors of Mukden¹ and Kirin,² which, it is feared, will culminate sooner or later in an armed conflict, people or means at Changchun³ are preparing to take refuge in the Railway Zone. Because of the frequent occurrence of incidents of this nature, and also because of the various business facilities which the new towns offer them, many Chinese merchants have found it advantageous to maintain their offices in the Japanese towns, thus constantly swelling their population. The annual increase of population in the Railway Zone is shown in the following table :

Year	Population				Percentage		Percentage of Increase per Year
	Japanese	Chinese	Foreigners	Total	Japanese	Chinese	
1912	30,426	33,435	4	63,865	48	52	7.6
1913	32,976	40,732	33	73,741	45	55	15.5
1914	35,663	49,016	53	84,732	42	58	14.9
1915	38,155	51,803	143	90,104	42	58	6.3
1916	40,158	59,985	164	100,307	40	60	11.3
1917	43,841	65,978	189	110,008	40	60	9.7
1918	49,346	79,618	199	129,163	38	62	20.7

1 Mukden (奉天). 2 Kirin (吉林). 3 Changchun (長春).

CHAPTER IV

SOUTH MANCHURIA RAILWAY COMPANY AND ITS WORK

Its nature and work; Its finances; Railways; Shipping; Harbour;
Coal mines; Electricity and gas; Hotels; Management of the
Railway Zone; Experimental laboratories; South Manchuria
Railway Company as master and servant of Manchuria.

Its Nature and Work :—Having finished our survey of the historical facts and events which have brought about the present situation in Manchuria, both economic and political, we now enter upon a sectional treatment of its various industries, their development, and the institutions contributing largely to such development, and we have selected as the first subject of our study the South Manchuria Railway Company, one of the greatest factors in the building up of present-day Manchuria. Indeed, so multifarious and so important are the tasks accomplished by this great company that we have thought it fitting to treat it first of all, and also to devote a whole chapter to its development and to a description of the different lines of its work.

Of the nature of the company, the author has heard people compare it, not so often nowadays as at the time of its establishment,—and take delight in so comparing it—with the East India companies established by England, Holland, France, and other European countries in the course of

the 17th and 18th centuries. But nothing is further from the truth. Those East India companies, ostensibly trading corporations, were in fact political organizations with even military powers conferred upon them by their respective Governments, whereas the South Manchuria Railway Company is an economic institution, pure and simple, in both name and reality. It has no hand even in the policing of its own Railway Zone, and has no power whatever over the soldiery stationed in Manchuria. Nor is there anything, even in its economic rights, that bears a semblance of "the sole right of trading with the East Indies." The difference is too clear to need further comment. That it was modelled to a great extent after the Chinese Eastern Railway Company there seems little doubt. Indeed, it could not be otherwise, since in many respects the company is nothing but the successor in South Manchuria of that Russian company. But in the organization of the South Manchuria Railway Company there is nothing of the vagueness that enshrouded that of the Russian company. It was established by a special charter of the Government, but essentially as a joint-stock company organized according to the commercial law of Japan.

It is Government enough in that its president, deputy-president, and directors are all appointees of the Government, but the directors are appointed from among the shareholders, and as for the auditors, their election is entirely in the hands of the shareholders. Nor are the powers conferred upon it half so great as those the Russian Government bestowed upon their own company, and we have already seen that it was for this very reason that Baron Goto refused to

accept the presidency of the company as first offered to him. It was certainly unbearable for a man of Baron Goto's calibre and statemanship to put himself under all the limits and restraints which the laws and regulations have prescribed in clear set terms upon the rights and duties of the South Manchuria Railway Company.

As to the nature of its business, the company, on its foundation, received certain Government orders, which are in effect as follows :

(1) That it should operate the seven lines of railway, which, with the exception of one, were ceded to Japan by Russia ;

(2) That the above-mentioned lines must be reconstructed to the gauge of 4 feet 8½ inches, and the section between Dairen¹ and Suchiatun² on the Dairen-Changchun³ Line be double-tracked within three years from the date the company is opened to business ;

(3) That it should provide the principal stations on the lines with all necessary accommodations for travellers and for the storage of goods ; also, connecting facilities for land and marine transportation services must be provided at the harbours reached by the lines ;

(4) That it should conduct for the convenience of the railways the following business :

Mining, especially coal-mining at Fushun⁴ and Yentai⁵ ;

Marine transportation ;

Electric works ;

1 Dairen (大連). 2 Suchiatun (蘇家屯). 3 Dairen-Changchun (大連長春). 4 Fushun (撫順). 5 Yentai (烟臺).

Commission sales of the principal goods transported
by the railways ;

Warehousing ;

Management of lands and buildings in the Railway
Zone ;

Other lines of business for which Government sanc-
tion has been obtained ;

(5) That the company should make all necessary arrangements for public works, education, and sanitation in the Railway Zone, and within the limits of the lands utilized by it in its supplementary works.

Such in effect are the orders given by the Government to the company on its foundation, and it will be seen in the following pages how and with what success the company has carried out the duties thus entrusted to it by the Government.

*Its Finances :—*It will be well to know at the outset how the company obtained all the funds required in the prosecution of these extensive works. Two means have been resorted to for this purpose : (1) Calling on its capital ; and (2) Borrowing.

(1) Capital : It has already been mentioned that the authorized capital of the company is 200 million yen. But of this 200 million, 100 million is in the form of Government shares representing the appraised value of the railway and other Government properties made over to the company, consequently these ranked as fully paid up from the beginning, and of course no further call could be made on them. The other half, viz., 100 million yen, was to be subscribed by the Japanese and Chinese Govern-

ments or by the Japanese and Chinese public. The Chinese Government was approached with the query as to whether it had any intention of subscribing to the same, but the answer made was in the negative. Eventually, the first issue of shares was limited to 20 million yen, of which only one-tenth was called in, and with this wonderfully small sum the company started business. Along with the progress of the business, more shares were issued for subscription, and further calls were made on those subscribed for, so that at this moment all but 20 million yen of the authorized capital has been taken up and all but 38 million yen of the entire subscribed capital is paid up. The result of the various calls is shown in the following table :

Authorized capital ...	Yen 200,000,000	2,000,000 shares of	
		Yen 100 each.	
Government shares ...	100,000,000	1,000,000	do
Shares for public sub- scription	100,000,000	1,000,000	do
Shares issued { 1st issue	20,000,000	200,000	do
{ 2nd issue... ..	40,000,000	400,000	do
{ 3rd issue... ..	20,000,000	200,000	do
Unsubscribed capital ...	20,000,000	200,000	do
{ Government shares	Yen 100,000,000		
{ Payment on 1st issue	20,000,000		
do 2nd do	20,000,000		
do 3rd do	2,000,000		
Paid up capital			
Total	Yen 142,000,000	at the end of	
		the year 1917.	
Unpaid capital	38,000,000	do	

(2) Borrowing: For this purpose debentures were floated in London from time to time. Little would one dream that English money has had so much to do with the development of this far eastern country. It may be said that the Manchurian railways were originally built

with French capital, and extended and improved with English money, for the Chinese Eastern Railway Company, by which they were originally built, was financed by the Russo-Chinese Bank which, in its turn, was backed by French financiers. At any rate, the world is ever so much indebted to the two Great Financiers of the world.

The dates, amounts, interests, etc., of these foreign loans are shown in the following table :

	Date	Amount	Value of issue per £100	Interest	Term
1st	... July 19, 1907	4,000,000	97	5	25 years
2nd	... June 5, 1908	2,000,000	98	5	3 do*
3rd	... December 16, 1908	2,000,000	97½	5	25 do
4th	... January 3, 1911	6,000,000	98	4½	29 do

Of late, however, the home market has been approached for this purpose. The debentures so issued are :

	Date	Amount	Value of issue per Yen 100	Interest	Term
		Yen	Yen		
1st	... August 1, 1917	5,700,000	100	6	15 years
2nd	... October 22, 1917	4,500,000	91½	5	30 do

LOANS OUTSTANDING.

Foreign Loan £12,000,000 Exchange value Yen 117,156,000.
Domestic Loan Yen 10,200,000.

Now let us go a step farther and see how the fund thus raised by the two means above mentioned have been utilized. The company has published a very detailed report in this respect which is reproduced below :

* Remarks :—Paid back in 1911.

Year	Rail-ways Yen	Work-shops Yen	Vessels Yen	Har-bours Yen	Mines Yen	Anshan- chan Iron Works. Yen
1907...	9,464,713	691,046	—	523,310	665,108	—
1908...	22,145,348	336,873	—	1,582,730	2,832,629	—
1909...	8,276,670	867,889	—	1,610,788	1,989,976	—
1910...	14,096,718	2,444,648	—	2,616,619	2,120,071	—
1911...	11,809,955	1,342,434	2,812,434	682,662	1,389,058	—
1912...	4,506,378	232,229	572,923	1,645,684	1,501,751	—
1913...	1,962,590	149,708	1,507,279	2,304,183	1,748,556	—
1914...	1,235,928	196,394	77,799	1,629,919	2,795,049	—
1915...	693,911	154,749	79,277	1,267,184	2,449,553	—
1916...	1,769,775	370,139	1,905,679	1,781,132	21,448	—
1917...	2,621,613	650,275	463,717	2,337,646	2,873,131	4,447,760
Total.	78,583,578	7,436,387	2,680,317	17,981,857	20,343,433	4,447,760
Percent- age ...	44.5	4.2	1.5	10.2	11.5	2.5

Year	Electricity, Gas, etc. Yen	Hotels Yen	Local In- stitutions Yen	Lands Yen	Buildings Yen	Total Yen
1907...	112,709	202,764	341,812	—	2,047,296	14,047,758
1908...	887,887	25,078	7,531	2,279,310	2,396,329	32,478,657
1909...	2,435,202	404,375	387,765	945,597	776,175	17,894,437
1910...	1,259,745	317,278	505,497	1,961,024	2,170,152	27,491,750
1911...	861,124	125,178	704,231	2,162,387	1,654,319	23,543,780
1912...	683,571	253,894	487,923	1,056,498	655,251	11,596,102
1913...	196,472	288,657	1,397,241	1,367,059	851,675	11,380,478
1914...	256,343	399,656	723,864	850,113	939,961	9,155,026
1915...	155,741	16,168	205,612	221,235	185,245	5,017,451
1916...	2,628,032	11,288	866,472	517,135	270,951	6,287,797
1917...	2,873,101	17,131	1,200,364	218,395	869,534	17,645,233
Total.	11,956,981	2,061,467	6,602,027	11,578,753	12,866,888	176,539,468
Percent- age ...	6.7	1.2	3.7	6.6	7.3	100

Thus it will be seen that up to 1917 more than 176 million yen had been invested in the various works engaged

in by the company, of which the railway took up some 78 million yen or 44 per cent. of the aggregate amount, mines 20 million yen or 11 per cent., harbours 18 million yen or 10 per cent., and building 12 million yen or 7 per cent., followed by land, local institutions, workshops, etc. Accustomed, as we are, to the big figures to which the stupendous expenditure the Great World War has given rise the world over, the amounts enumerated may seem rather small. But it should be remembered that they were used—at least, the greater part of them were used—when the same amount of money fetched three to five times as much as it does now, and that too in a country where material and labour, especially the latter, were as many times cheaper than they were in Europe or America.

Railways.:—During the Russian possession of them the Manchurian railways, as has been noted, were not much utilized for commercial purposes, being chiefly engaged in military transportation. The same condition prevailed of necessity during their possession by the Japanese forces in the wake of the Russo-Japanese War. But, from the moment they were handed over to the South Manchuria Railway Company, a complete change was made in their working. Commerce and industry became their sole purpose, and if Manchuria owes anything to the railways for its economic development, it dates from the moment when they were placed under the charge of the South Manchuria Railway Company.

The railways acquired by the company from the Government on April 1, 1907, were as follows :

The main line between Dairen¹ and Changchun² (437½ miles).

Port Arthur³ Branch Line (28.8 miles).

Liushutun⁴ Line (3.6 miles).

Yingkow⁵ Branch Line (13.4 miles).

Yentai⁶ Branch Line (9.7 miles).

Fushun⁷ Branch Line (38.9 miles).

Mukden-Antung⁸ Line (188.9 miles of light railway).

(Now 170.7 miles of standard gauge).

The line from Mukden⁹ to Hsinmintun,¹⁰ originally included in the lines acquired by the company, was made over to China on June 1, 1907. The gauge of all the above lines, when acquired from the Government, was 3 feet 6 inches, with the exception of the Mukden-Antung⁸ Line which was only 2 feet 6 inches, the Russian gauge of 5 feet being narrowed during the war to make the lines available for Japanese rolling stock.

Immediately after the acquisition of the above railways, the company commenced the changing of them to the standard gauge of 4 feet 8½ inches—except the Mukden-Antung⁸ Line—and also the doubling of the track between Dairen¹ and Suchiatun,¹¹ a distance of 238½ miles, and as early as November, 1907, traffic on the standard gauge on the Port Arthur³ Line, and on June 1, 1908, on the entire main line, as well as on the Fushun⁷ and Yingkow⁵ Branch Lines, was opened.

1 Dairen (大連). 2 Changchun (長春). 3 Port Arthur (旅順). 4 Liushutun (柳樹屯). 5 Yingkow (營口). 6 Yentai (煙臺). 7 Fushun (撫順). 8 Mukden-Antung (奉天安東). 9 Mukden (奉天). 10 Hsinmintun (新民屯). 11 Suchiatun (蘇家屯).

The doubling of the track between Dairen¹ and Suchiatun² was also begun about the same time, and was completed on October 27, 1909. The expenditure on the above enterprises amounted to some Yen 15,000,000.

Yinkow³ Branch Line used to have its terminal station at Niuchiatusun,⁴ but, by virtue of the Manchurian Convention signed in September, 1909, the terminal station was shifted to the railway town of Yingkow.⁵ The new station was opened in November, 1909, and the old Niuchiatusun⁴ Station was converted into a goods station. In March, 1914, the goods traffic, too, was transferred to the new station, and the old one is now being made use of as a coal depôt. The reconstruction of Yentai⁶ Branch Line, which became necessary in consequence of the increased output by the coal mine at Yentai,⁶ was completed on January 7, 1910.

Liushutun⁶ Branch Line, which is not operated at present, was also converted to the standard gauge in December, 1909.

The Mukden-Antung⁷ Line was originally a light railway of 2 feet 6 inches gauge constructed for military purposes by the Japanese Army during the war. In December, 1905, the Japanese Government concluded an agreement with the Chinese Government for its conversion to the standard gauge, and the company was ordered to reconstruct the line within the period of three years. But, partly owing to the topographical difficulties, as the line traverses a most mountainous country, and partly to

1 Dairen (大連). 2 Suchiatun (蘇家屯). 3 Yinkow (營口). 4 Niuchiatusun (牛家屯). 5 Yentai (煙臺). 6 Liushutun (柳樹屯). 7 Mukden-Antung (奉天安東).

the difficulties that arose between the Japanese and Chinese authorities, the work was not started until August, 1909. The most difficult pieces of engineering work were the excavation of the tunnels piercing Fuchinling,¹ 4,884 feet in length, and the Chikuanshan,² 3,254 feet in length, and the bridge over the River Taitze,³ 1,779 feet in length. The whole work, inclusive of 24 tunnels, 205 bridges, and 213 culverts, which taxed the best engineering skill, was completed in 2 years and 2 months, and it was on November 1, 1911, that the line was opened to traffic. The reconstruction cost about Yen 23,000,000.

The operating of the railways was far from being satisfactory at the time when the company took them over from the Government. The management started to improve it with commendable vigour, and soon a marked change was noticed on all its extensive lines. Some of the ill-appointed stations were pulled down and new buildings erected; others were extended or repaired. Warehousing accommodation, available at only a few stations, was extended to all the large stations.

Through traffic between Europe and the Far East through South Manchuria was opened in October, 1908, when the Company inaugurated an express service between Dairen⁴ and Changchun,⁵ operating each way three times a week (reduced to once weekly some time after the outbreak of the Great War and entirely discontinued on Siberia becoming the victim of revolutionary uprising), covering the distance in 14½ hours, and connecting at

1 Fuchinling (福金嶺). 2 Chikuanshan (鷄冠山). 3 River Taitze (太子河). 4 Dairen (大連). 5 Changchun (長春).

Changchun¹ with the Trans-Siberian trains of the International Sleeping Car and Express Train Company and the Russian State Express, and at Dairen² with the steamship services operated by the company between that port and Shanghai.³

Arrangements for through traffic, for both passengers and goods, were made with many railway and steamship companies, including the Chinese Eastern Railway, Chinese Government Railway, Nippon Yusen Kaisha, and Osaka Shosen Kaisha. All this resulted in a great increase in both passenger and goods traffic, as may be seen from the following table :

Working Year	Passengers	Tonnage of Goods Short Tons	Receipts Yen	Expenditure Yen
1907	1,512,231	1,486,434	9,768,887	6,101,615
1908	1,868,140	2,609,036	12,537,142	5,161,408
1909	2,179,062	3,568,527	15,016,198	5,818,333
1910	2,349,088	3,922,164	15,671,605	6,542,640
1911	3,158,270	4,705,690	17,526,288	6,908,354
1912	3,905,822	4,681,698	19,907,456	7,846,923
1913	4,143,687	5,782,161	22,275,132	7,913,948
1914	3,617,547	5,705,948	23,216,722	8,345,286
1915	3,708,165	5,860,716	23,532,118	8,174,520
1916	4,410,816	6,229,757	27,815,349	8,435,939
1917	5,844,929	7,274,177	34,457,923	10,858,734

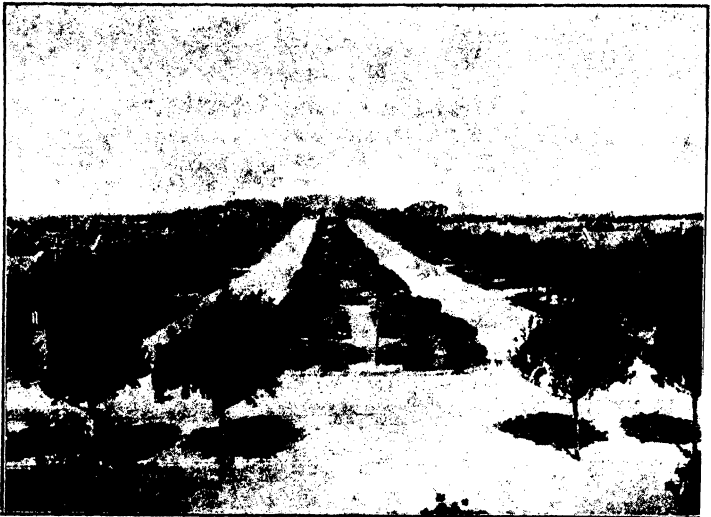
Remarks:—The decrease in the number of passengers for 1914 is due to the outbreak of the Great European War in that year.

(a) Warehousing Business: Warehousing was first undertaken by the South Manchuria Railway Company in October, 1908, at the Wharf Office in Dairen² on a small scale. As warehouses and goods sheds were

Changchun (長春). 2 Dairen (大連). 3 Shanghai (上海).



One of the South Manchuria Railway Workshops



One of the villages for the employees of the workshops

completed one after the other, the business pertaining thereto was conducted more and more extensively. But it was not till September, 1911, that the warehousing business of the company came to be conducted on a truly extensive scale and on as truly an improved system. The business started at Dairen¹ Harbour and 16 of the principal stations has since been extended to 29 stations.

The aggregate tonnage of the goods warehoused during 1917 was 3,664,385 short tons, and that released 3,157,080 short tons, the average tonnage in storage per day being 290,697 tons.

(b) Railway Workshops: The company, on its formation, took over from the Government a workshop at Dairen¹ Station. This was temporarily repaired to meet immediate needs pending the erection of the new workshops in contemplation. The latter were erected at Shahokou,² near Dairen,¹ the work being commenced toward the end of 1908 and completed on August 9, 1911. These workshops are among the largest and best equipped in the Orient, and have their own waterworks. The area comprises about 245 acres, of which about 11 acres is covered with offices and workshops. The workshops have the capacity of simultaneously executing repairs on 26 locomotives, 36 passenger cars, and 130 goods cars. Of the rolling stock now in use by the company, 6 locomotives, 25 passenger cars, and 461 goods cars were constructed at these workshops.

Orders from the Chosen Railway and the Chinese Government Railways have also been filled.

1 Dairen (大連). 2 Shahokou (沙河口).

Adjoining the workshops is a village for the employees, containing about 700 houses covering a little more than 6 acres, which is undoubtedly one of the pleasantest spots in the country around, with finely laid out streets, perfect drainage, waterworks, etc., and provided with a primary school, a hospital, a post office, and some provision stores.

Shipping:—The increasing popularity of the through traffic from Europe to the Far East induced the company to institute a regular steamship service between Dairen¹ and Shanghai,² and this was undertaken with steamers chartered from the Nippon Yusen Kaisha after August 10, 1908, thus establishing the shortest and quickest route between Europe and Shanghai.²

In December, 1914, Tsingtao³ was included in this line as a port of call, one steamer calling there on the outward trip and the other on the homeward trip. A through cargo service was also opened between this line and important ports on the Yangtze⁴ in connection with the Nisshin Kisen Kaisha service and the Shantung⁵ Railway.

The following figures give the results of the shipping department of the company during the last ten years.

Year	Passengers	Freight Tonnage	Receipts
		Short Tons	Yen
1908	1,726	10,759	78,320
1909	4,382	31,735	191,238
1910	4,775	55,836	280,077
1911	7,793	62,561	354,631
1912	7,325	105,016	492,648
1913	7,534	103,332	463,272

1 Dairen (大連). 2 Shanghai (上海). 3 Tsingtao (青島). 4 Yangtze (楊子江). 5 Shantung (山東).

Year	Passengers	Freight	Tonnage	Receipts
		Short Tons		Yen
1914	8,401	132,423		446,241
1915	14,335	173,725		712,269
1916	20,305	156,557		1,105,753
1917	24,623	157,786		1,906,663

Remarks:—The remarkable increase in both passenger and goods traffic since the fiscal year 1915 was the result of the inclusion of Tsingtao¹ in the ports of call.

With a view to further affording facilities for passenger and goods traffic to South China, and also to providing for the export of Fushun² coal, the company instituted in October, 1913, a regular steamship service between Dairen³ and Hongkong⁴ and Canton,⁵ employing four steamers ranging from 2,621 to 4,555 tons.

Regular steamship services have since been opened between Dairen³ and Antung,⁶ Tientsin,⁷ Lungkou,⁸ Tengchou,⁹ and Chefoo,¹⁰ all of which are yielding good returns and augur continued prosperity.

Harbour :—When Dairen³ Harbour was placed under the company's charge it was far from being complete, only one wharf having been finished, whereas it has now three, while quays and breakwaters were only partly made. The dredging of the port had also been very imperfectly done, the greater portion being entirely untouched. The company followed in the main the plan laid out by the Russians, and the principal construction works executed so far by the company are as follows :

(1) The Northwest Breakwater : Stretching from a

1 Tsingtao (青島). 2 Fushun (撫順). 3 Dairen (大連). 4 Hongkong (香港). 5 Canton (廣州). 6 Antung (安東). 7 Tientsin (天津). 8 Lungkou (龍口). 9 Tengchou (登州). 10 Chefoo (煙臺).

point about 1,200 feet distant from the end of the East Breakwater in the northwest, the breakwater is 12,500 feet long, 20 feet wide at the top, and 19 feet above low water.

(2) Dredging of the Port: The inner basin has been dredged from 20 feet to 35 feet, and the fairway outside the basin to 36 feet at low water. The area dredged is about 1,020 acres, 654 acres in the inner basin and 366 acres outside it.

(3) About 80 acres on the shore of Jijiko¹ at the eastern end of the city of Dairen² have been reclaimed for use as a coal depôt, etc.

(4) Construction of New Quay: The ever-increasing demand for berthing accommodation necessitated the construction of a third wharf, and a new quay has been constructed parallel with, and to the west of, the Main Wharf. The quay is 1,960 feet long and 400 feet wide.

The harbours of Port Arthur,³ Yingkow,⁴ and Antung⁵ have also been improved through the construction of jetties and the reclamation of the shore.

The loading and discharging of goods at the port of Dairen,² previously entrusted to numerous forwarding agents, was in October, 1907, brought under the direct management of the company with highly satisfactory results.

Along with the progress of the harbour works many improvements have been made in the wharfing facilities, including the erection of 35 goods sheds (with a total floor area of a little over 38 acres, five bean oil tanks (each

1 Jijiko (寺兒溝). 2 Dairen (大連). 3 Port Arthur (旅順). 4 Yingkow (營口). 5 Antung (安東).

capable of holding 100 tons), sixteen steam launches, twenty-four lighters of varying size, two water-boats, two fumigation-boats, and one dredger.

The progress of the wharfing business at the port of Dairen¹ may be gathered from the following table :

Work- ing Year	Number of Ships arriving at Wharf	Tonnage of Goods Loaded and Discharged (Shipping)	Tonnage of Goods Loaded and Discharged (Railway)	Receipts	Expenditure
		Short Tons	Short Tons	Yen	Yen
1907 ...	1,143	919,952	417,860	572,493	560,151
1908 ...	1,397	1,076,131	1,082,681	1,020,828	846,676
1909 ...	1,376	1,366,598	1,263,946	1,380,731	1,133,292
1910 ...	1,574	1,484,719	1,248,396	1,213,328	1,101,813
1911 ...	1,752	1,407,968	1,202,871	1,256,744	1,159,955
1912 ...	1,968	1,977,887	1,662,311	1,688,820	1,489,384
1913 ...	2,083	2,360,766	2,035,800	1,911,717	1,728,911
1914 ...	2,280	2,668,330	2,421,002	2,290,612	1,963,967
1915 ...	2,011	2,404,879	1,991,159	2,292,718	1,921,717
1916 ...	1,925	2,733,896	2,458,360	2,502,121	2,137,880
1917 ...	2,072	3,321,186	2,813,186	3,499,934	3,106,862

Remark:—As the company's wharf business is intended to afford facilities to the railway goods traffic, the charges for loading and discharging goods have constantly been lowered as receipts increased.

The company has also constructed a wharf in Shanghai² with warehouses, sheds, offices, etc., which has been open to business since October 10, 1911. The following is the tonnage (short tons) of goods loaded and discharged at the wharves of Yingkow,³ Antung,⁴ and Shanghai²:

1 Dairen (大連). 2 Shanghai (上海). 3 Yingkow (營口). 4 Antung (安東).

	Fiscal Year		At Yingkow ¹	At Antung ²	At Shanghai ³
1912		335,014	44,774	251,472
1913		500,054	102,110	205,541
1914		486,960	80,356	263,430
1915		430,183	136,338	292,121
1916		189,157	239,067	279,182
1917		149,110	318,236	412,882

(5) Docking Accommodation: There was in Dairen⁴ a dockyard originally built by the Russians. It was taken over by the company in 1907 from the Imperial Japanese Navy. The management of it was however entrusted to the Kawasaki Dockyard Company in July, 1908. Subsequently steps were taken to increase its docking capacity, and the result is that the dock, originally only capable of accommodating a 3,000 ton steamer at most, is now large enough to take a 6,000 ton steamer with ease.

Coal Mines:—On April 1, 1907, the company acquired from the Government the coal mines at Fushun,⁵ Yentai,⁶ and Chatzuyao⁷ near Wafangtien,⁸ and again in July, 1907, in accordance with the Russo-Japanese Railway Protocol, the coal mines at Shihpeiling⁹ and Taochiatun¹⁰ were transferred to the company by the Russian Government. Only two of these, viz., Fushun⁵ and Yentai,⁶ are worked by the company, that at Chatzuyao⁷ being worked by a private Japanese concern, while those at Shihpeiling⁹ and Taochiatun¹⁰ are no longer worked.

1 Yingkow (營口). 2 Antung (安東). 3 Shanghai (上海). 4 Dairen (大連). 5 Fushun (撫順). 6 Yentai (煙臺). 7 Chatzuyao (柞子窩). 8 Wafangtien (瓦房店). 9 Shihpeiling (石碑嶺). 10 Taochiatun (陶家屯).

(a) Fushun¹ Colliery: This mine is situated about 22 miles east of Mukden² as the crow flies. The coal field, running east and west for about 10 miles parallel with the River Hun,³ shows an average gradient of about 30 degrees in the direction of the river. The thickness of the coal deposits is 78 feet in the thinnest part and 280 feet in the thickest, averaging about 130 feet, and it is estimated that they contain at least 800 million tons. At the time of the transfer of the colliery to the company, mining was being conducted on a very small scale with a daily output of 360 tons only, whereas to-day the total output of the original seven pits now in operation amounts to over 4,000 tons daily. In addition to the above, two new shafts have been sunk at each of the two places called Chienchin-chai⁴ and Yangpaipu,⁵ each having an up-cast pit with an open diameter of 18 feet, and a down-cast pit with an open diameter of 21 feet.

The pit at Chienchinchai⁴ has been named Oyama Pit, and that at Yangpaipu⁵ Togo Pit. The boring of Oyama Pit was begun in November, 1907, and in December, 1909, the coal seam was reached at the depth of 1,160 feet. The boring of Togo Pit was begun in November, 1908, and in April, 1910, the coal seam was reached at the depth of 862 feet. When Oyama and Togo Pit are fully developed the daily output is expected to reach 2,500 tons per day from each pit.

At present the daily output of Oyama Pit is 1,800 tons and that of Togo Pit 1,300 tons, making the aggregate,

1 Fushun (撫順). 2 Mukden (奉天). 3 River Hun (渾河). 4 Chienchin-chai (千金寨). 5 Yangpaipu (楊柏堡).

the original pits above mentioned included, 7,000 tons per day. In order to place the mining operations on a more economical basis, the so-called sandflushing method was applied to Yangpaipu¹ Pit by way of trial. The experiment having proved satisfactory, the method is being applied to the other pits.

The old coal-pillar system renders it necessary to leave at least three-fourths of the coal seam untouched for the sake of support, whereas by the sand-flushing method the whole can be mined. But since the new method cannot be applied effectively unless that part of the pit already excavated is filled with sand, an operation that will take some years to perform and entail decrease in output, it became imperative for the company to devise some means to offset this expected loss. This was met by the excavation of an open cast at Kuchengtzu² at the west end of the local field, and an incline at Wantawu.³ These two combined yield together a daily output of about 700 tons.

The following figures show the total output of coal from the Fushun⁴ Mine during the past 11 years.

Year	Long Tons	Year	Long Tons
1907	233,325	1913	2,185,453
1908	490,720	1914	2,147,432
1909	705,042	1915	2,169,245
1910	898,482	1916	2,039,578
1911	1,343,198	1917	2,275,905
1912	1,470,150		

1 Yangpaipu (楊柏堡). 2 Kuchengtzu (古城子). 3 Wantawu (萬達
風). 4 Fushun (撫順).

(b) Yentai¹ Coal Mine: This mine is situated about 10 miles northeast of Liaoyang² Station, and is connected by a side line with Yentai¹ Station. The coal-field, running for about $3\frac{1}{2}$ miles from south to north, with a breadth of one mile from east to west, is estimated to contain a deposit of 20,000,000 tons. At the outset, prospecting and other preliminary work was all that was undertaken. In the latter half of the working year 1910 the colliery was operated on a business footing with a daily output of only about 300 tons. The output is semi-anthracite and has its own special uses.

OUTPUT OF YENTAI¹ COAL MINE

Year	Long Tons	Year	Long Tons
1910	15,231	1914	96,815
1911	39,326	1915	71,026
1912	43,104	1916	91,645
1913	95,300	1917	113,679

Electricity and Gas :—The company maintains electric works at Dairen,³ Mukden,⁴ Changchun,⁵ and Antung.⁶

The electric works at Dairen³ were originally installed by the Russians. They were extended by the company and, at the end of March, 1917, the number of electric lights installed at Dairen³ was 172,991 (converted into the basis of 10 candlepower), and the electric power supplied during the fiscal year 1917 was 4,418,789 horse power.

The company also runs 17 miles of electric tramway in the streets of Dairen³ and its suburbs.

1 Yentai (烟臺). 2 Liaoyang (遼陽). 3 Dairen (大連). 4 Mukden (奉天). 5 Changchun (長春). 6 Antung (安東).

The Mukden¹ electric works, also maintained by the company, was supplying 31,522 lights (converted to the 10 candlepower basis) and over 321,240 horse power of motor power at the end of the fiscal year 1917. During that year, those in Antung² supplied 31,005 light and motor power amounting to 739,926 horse power, and those in Changchun³ 35,871 lights and 2,694,656 horse power.

The following table shows the growth of the electricity undertakings in Dairen,⁴ Mukden,¹ Changchun,³ and Antung.²

Working Year	Dairen ⁴ Kilowatts	Mukden ¹ Kilowatts	Changchun ³ Kilowatts	Antung ² Kilowatts
1907	925,514	—	—	—
1908	1,795,914	31,936	—	—
1909	3,309,868	317,551	58,305	—
1910	6,019,875	509,328	729,107	94,287
1911	7,452,420	725,905	736,190	385,435
1912	7,649,300	823,993	734,665	422,610
1913	8,235,340	955,864	1,577,343	716,046
1914	9,563,229	949,443	2,026,099	1,076,644
1915	10,292,198	1,121,380	2,152,770	1,268,300
1916	11,804,942	1,246,707	2,982,822	1,379,406
1917	14,792,590	1,418,052	3,838,650	1,763,142

The company maintains gas works in Dairen.⁴ They were put in operation in March, 1910, with the productive power of 280,000 cubic feet per diem, which was increased to 350,000 cubic feet in 1912, 650,000 in 1913 and 800,000 in 1917. In 1914 a water-gas producer, capable of putting out 100,000 cubic feet a day, was erected to provide for emergency.

1 Mukden (奉天). 2 Antung (安東). 3 Changchun (長春). 4 Dairen (大連).

The total amount of gas produced during the working year 1917 was 128,954,400 cubic feet, the by-products being 7,671 tons of coke and 169,824 gallons of tar.

Hotels :—The Yamato Hotel at Dairen¹ was opened in August, 1907, but the popularity of the new route between the East and West was such that the original building was soon found far too small to meet the requirements. A new building was therefore contemplated, and the present elegant home of the Dairen¹ Yamato Hotel, covering 650 *tsubo* (about half an acre), 74 feet high, and containing altogether 115 rooms for guests, was completed in June, 1914. The Yamato Hotel in Port Arthur² was opened in March 1, 1908, that in Changchun³ in October, 1908.

The new Yamato Hotel in Mukden,⁴ which forms part of the railway station, was opened in October, 1910.

The following figures represent the number of daily guests accommodated by the various Yamato Hotels (visitors who stayed more than one day being counted for as many days as they stayed) :

Year		Dai- ren ¹	Port Arthur ²	Chang chun ³	Muk- den ⁴	Hoshiga ura
1907	... ..	1,474	40	—	—	—
1908	... ..	3,556	1,296	1,144	—	—
1909	... ..	6,658	1,383	2,466	—	—
1910	... ..	6,978	922	4,720	1,830	305
1911	... ..	10,811	1,053	4,581	3,373	1,748
1912	... ..	8,395	1,078	3,589	3,786	1,220
1913	... ..	7,536	812	4,030	4,822	1,630

1 Dairen (大連). 2 Port Arthur (旅順). 3 Changchun (長春).
4 Mukden (奉天).

Year		Dai- ren ¹	Port Arthur ²	Chang- chun ³	Muk- den ⁴	Hoshiga- ura
1914	... ..	8,435	601	4,900	4,618	1,455
1915	... ..	6,457	415	3,958	2,775	1,171
1916	... ..	7,853	676	5,870	3,392	2,323
1917	... ..	14,613	1,721	9,606	5,580	2,726

Remarks:—The remarkable decrease in the number of guests during the fiscal year 1915 was owing to the Great War.

Management of the Railway Zone :—The importance of the Railway Zone in the building up of present-day Manchuria has been set forth. It is, as it were, the lungs of the country, breathing in the fresh air of the outside world and giving vitality to its whole being. The administration of this most important part of Manchuria, except its policing, is entrusted to the South Manchuria Railway Company. The company assumes the obligation of providing the zone with the necessary schools, hospitals, roads, and streets, in a word, with everything that is necessary for the establishment of an advanced society, and in consideration thereof it is empowered by the Government to collect house rates and make other necessary assessments from the residents in the zone, subject to the Government's sanction, in order to recoup its outlays.

The principle upon which these levies are made is, that the outlay for buildings and improvements of public utility within the Railway Zone is borne by the company, whilst the current expenses in connection therewith are paid out of the rates and fees levied upon the residents, the company making good any deficit.

1 Dairen (大連). 2 Port Arthur (旅順). 3 Changchun (長春).
4 Mukden (奉天).

The following figures show the amount the company has collected and of the deficit it has made good in the management of the Railway Area.

Year	Rates and Fees		Year	Rates and Fees	
	Collected	Deficit		Collected	Deficit
	Yen	Yen		Yen	Yen
1907 ...	120,794	130,212	1913 ...	900,853	1,050,686
1908 ...	274,387	124,916	1914 ...	1,778,545	1,085,655
1909 ...	370,961	230,299	1915 ...	1,517,840	973,938
1910 ...	444,100	497,213	1916 ...	1,479,600	1,267,560
1911 ...	467,955	615,120	1917 ...	1,930,284	1,608,424
1912 ...	633,211	767,800			

Remark: The sudden rise in the amount of rates and fees in 1914 is due to the revision of the assessment system.

The total area of the land which the company took over from the Government in April, 1907, comprised 45,000,000 *tsubo* (44,111 acres). This was increased by purchase and adjustment, and, at the end of the fiscal year 1915, the land owned by the company comprised over 6,730,000 *tsubo* (5,497 acres) within the leased territory of Kwantung¹ and over 55,610,000 *tsubo* (45,426 acres) outside it, including lands owned in Harbin, Tientsin,² Shanghai,³ etc., making a total area of over 62,350,000 *tsubo* (50,931 acres) in all. These tracts of land include some used by the Government and some used by the company direct for railway stations, offices, roads, workshops, etc., and for mining purposes, while a good portion thereof is leased as building lots or for agricultural purposes. At the end of the fiscal year 1917 the total area of land was 14,786,379 *tsubo* (12,075 acres), including 1,415,769 *tsubo*

1 Kwantung (關東). 2 Tientsin (天津). 3 Shanghai (上海).

(1,156 acres) for building lots, yielding the company a total annual rent of Yen 221,875. The rents ranged from $\frac{1}{2}$ *sen* to 6 *sen* per *tsubo* per month for building lots, and from $\frac{1}{2}$ *rin* to 2 *sen* per *tsubo* per annum for agricultural land. They are graduated into classes according to local conditions. Exclusive of the land set apart for military use and for use of the Civil Government and the Railway Company itself, the company proposes to lease as much of its land as possible to individuals at stated rents.

When the company took over the Railway Zone there were upon it about 5,000 buildings covering 214,000 *tsubo* (174 acres), but, owing to the development of its enterprises, these had increased at the end of the fiscal year 1917 as shown in the following table :

	Area of Land		No. of Buildings	Buildings Area of Land for Buildings	
	<i>Tsubo</i>	Acres		<i>Tsubo</i>	Acres
Lands belonging to the Railways ...	68,336,681	55,822	11,177	411,209	336.0
Others	106,565	87	45	4,695	3.8
Total	68,443,246	55,909	11,222	415,904	339.8

The population and houses in the Railway Zone are steadily on the increase. In March, 1908, there were only 8,600 families and 30,000 residents, while in March, 1918, there were 29,717 families and 129,163 residents. In order to promote the prosperity of the Railway Zone the creation of up-to-date towns along the railway was considered most important, and this was realized at Changchun,¹ Mukden,² Liaoyang,³ and ten other places. The company's roads are

1 Changchun (長春). 2 Mukden (奉天). 3 Liaoyang

divided into five classes, according to width, viz., 120 feet, 90 feet, 72 feet, 48 feet, and 36 feet. The first class to fourth class inclusive are provided with side walks.

Special attention has been paid by the company to the sewerage and waterworks, the perfection of which forms a characteristic of the new towns built by it. Waterworks have been constructed at Shahokou,¹ Wafangtien,² Hsiungyaocheng,³ Liaoyang,⁴ Mukden,⁵ Tiehling,⁶ Szupingchieh,⁷ Kungchuling,⁸ Changchun,⁹ Antung,¹⁰ Lienshankuan,¹¹ Chihkuanshan,¹² and Penhsihu,¹³ while at other places wells have been sunk to supply the needs of the inhabitants. Parks, markets, slaughter-houses, cemeteries, and crematoriums have also been established.

(a) Hospitals: Before the company took over the management of the Railway Zone there existed in Dairen¹⁴ a central military hospital, and branch hospitals and medical stations in Wafangtien,² Tashihchiao,¹⁵ Liaoyang,⁴ Mukden,⁵ Tiehling,⁶ Kungchuling,⁸ Chienchinchai,¹⁶ Tsaohokou,¹⁷ and Antung.¹⁰ These were taken over by the company and were extended and popularized, with the result that there is now a central hospital in Dairen¹⁴ with branch hospitals at Wafangtien,² Tashihchiao,¹⁵ Liaoyang,⁴ Mukden,⁵ Tiehling,⁶ Kaiyuan,¹⁹ Changtu,²⁰ Kungchuling,⁸ Changchun,⁹ Penhsihu,¹³ Chiaotou,²¹ Chihkuanshan,¹² Antung,¹⁰ Yingkow,²² and Chienchinchai¹⁶ in

1 Shahokou (沙河口). 2 Wafangtien (瓦房店). 3 Hsiungyaocheng (熊岳城). 4 Liaoyang (遼陽). 5 Mukden (奉天). 6 Tiehling (鐵嶺). 7 Szupingchieh (四平街). 8 Kungchuling (公主嶺). 9 Changchun (長春). 10 Antung (安東). 11 Lienshankuan (連山關). 12 Chihkuanshan (鷄冠山). 13 Penhsihu (本溪湖). 14 Dairen (大連). 15 Tashihchiao (大石橋). 16 Chienchinchai (千金寨). 17 Tsaohokou (草河口). 18 Tashihchiao (大石橋). 19 Kaiyuan (開原). 20 Changtu (昌圖). 21 Chiaotou (橋頭). 22 Yingkow (營口).

Fushun,¹ and medical stations at Shahokou,² Jijiko,³ Omicho,⁴ Hsiungyaocheng,⁵ Haicheng,⁶ Szupingchieh,⁷ and Tsaohokou,⁸ and in the Chinese towns of Mukden⁹ and Changchun.¹⁰

The number of patients treated in the hospitals together with their receipts and expenditure will be seen from the following table :

Working Year	In-door Patients	Out-door Patients	Receipt Yen	Expenditu Yen
1911	195,601	466,682	299,055	517,790
1912	214,917	489,803	418,834	643,146
1913	272,675	597,641	524,881	719,667
1914	326,093	693,827	655,948	843,709
1915	343,039	724,893	709,742	823,804
1916	386,713	827,036	830,160	949,497
1917	438,313	949,013	973,215	?

(b) Education: This matter was taken in hand as soon as the company was installed master of the Railway Zone, and the number of schools has been increased as children of school age increased. So far the company has established 17 primary schools for Japanese children. Schools for Chinese children have also been established at Wafangtien,¹¹ Hsiungyaocheng,⁵ Kaiping,¹² Liaoyang,¹³ Kaiyuan,¹⁴ Szupingchieh,⁷ Kungchuling,¹⁵ and Changchun,¹⁰ and Japanese language schools at Tiehling,¹⁶ Fushun,¹ and Penhsihu.¹⁷

At 28 places continuation classes for technical education

1 Fushun (撫順). 2 Shahokou (沙河口). 3 Jijiko (寺兒溝). 4 Omicho (近江町). 5 Hsiungyaocheng (熊岳城). 6 Haicheng (海城). 7 Szupingchieh (四平街). 8 Tsaohokou (草河口). 9 Mukden (奉天). 10 Changchun (長春). 11 Wafangtien (瓦房店). 12 Kaiping (蓋平). 13 Liaoyang (遼陽). 14 Kaiyuan (開原). 15 Kungchuling (公主嶺). 16 Tiehling (鐵嶺). 17 Penhsihu (本溪湖).

have been instituted. Libraries, playgrounds for children, and various other accommodations for the younger generation have been provided at all the important points along the railway line.

Free railway passage is granted to children attending schools, and boarding-houses are attached to many schools so as to save the children from making long journeys to and from school, especially in the cold season.

The following figures show the increase in school children in the Railway Zone.

Year	Children	Year	Children
1907... ..	262	1913	2,618
1908... ..	644	1914	3,083
1909... ..	930	1915	3,462
1910... ..	1,320	1916	3,957
1911... ..	1,702	1917	5,338
1912... ..	2,260		

The company has further established a medical college at Mukden¹ called South Manchuria Medical College, which is at present attended by 182 students (among whom are 71 Chinese), a technical school at Dairen² called South Manchuria Technical School, attended at present by 279 students, and a normal school, also at Dairen,² for the training of primary school teachers.

Experimental Laboratories:—(a) Central Laboratory: There are two institutions under the management of the company established for the purpose of encouraging industry; the Central Laboratory and the Geological Institute. The Central Laboratory was formerly under the control of

¹ Mukden (奉天). ² Dairen (大連).

the Kwantung¹ Government and was taken over by the company in May, 1910.

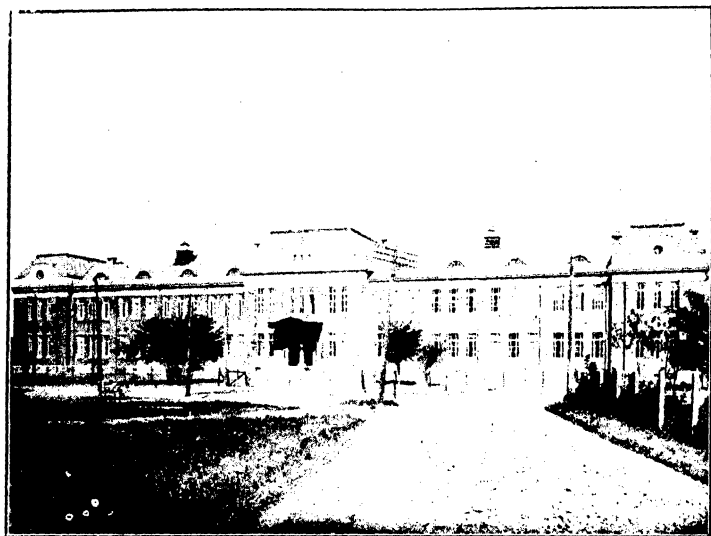
The company then gradually enlarged the work of the Laboratory and reorganized it into the following divisions :

Analysis, Applied Chemistry, Tussor Filature with Dyeing and Weaving, Ceramics, Brewing, Hygiene, Electro-Chemistry, and Experimental Bean Mill.

The Laboratory aims at pursuing the study, from both scientific and commercial points of view, of the analysis of the coal and iron ores in Manchuria, clays and silicious stone as materials for glassmaking, method of manufacturing salt, uses of beans, manufacture of paper pulp from *kaoliang* stalks, distillation of *kaoliang* spirit, utilization of *kaoliang* residue after the distillation of *samshu* or *kaoliang* spirit, examination of water, manufacture of medicines, reeling of tussor silk and dyeing and weaving of the same, and the botanical products of Manchuria. If the result of an experiment gives promise of becoming a paying industry, an experimental plant is established to subject the experiment to a practical test as to its commercial workability.

In April, 1910, a tussor filature was founded, and a dyeing and weaving factory was completed in May, 1915, the machinery being under installation at present. The ceramic factory, comprising a pottery and a brick kiln, was completed in January, 1914, and is in operation. The brick kiln produces fire-proof bricks of excellent quality at a moderate cost. The *kaoliang* distillery was finished in March, 1914, and distilling was started at once experimentally. Improvement was made by degrees, and of late a

¹ Kwantung (關東).



Central Laboratory maintained by the S. M. R. Co.



Maiden (奉天) Experimental Farm conducted by the same company

successful process has been worked out for obtaining lactic acid from the *kaoliang* residue.

The experimental bean mill was completed in February, 1914, and the work of manufacturing oil from beans according to the latest extraction system was begun the next month. The products are found to be of a satisfactory quality and are in popular demand.

The work of manufacturing fatty acids and glycerine from bean-oil gave fairly good results so both factories were handed over to private management in September, 1915.

There are two new enterprises under promotion at present, viz., the manufacture of hardened oil and of salvarsan.

(b) Geological Institute: The Geological institute is intended mainly for the investigation and analysis of the oil, minerals, etc., in Manchuria and Mongolia, the surveys of which from a geological point of view have been practically concluded. A geological map and a pictorial table of the mineral products of Manchuria are in preparation.

(c) The Industrial Experimental Station: The company has eleven nurseries at different places along the railway lines for the experimental growing of saplings, vegetables, flowering plants, and pastures. In April, 1913, an experimental agricultural station was established for the purpose of improving and developing the agricultural, sericultural, pastoral, and afforesting industries. The principal station was founded at Kungchuling,¹ and a branch station at Hsiungyaocheng.²

South Manchuria Railway Company as Master and Servant of Manchuria:—The perusal of the foregoing pages

1 Kungchuling (公主嶺). 2 Hsiungyaocheng (熊岳城).

must have brought home to the minds of our readers the extent of the work now being performed by the South Manchuria Railway Company. This great company is playing in fact the part of both master and servant in Manchuria, and every day of travel in that land will serve to convince one of this fact. The traveller journeys in the company's cars and stops at the company's hotels, which are heated by coal from the company's own mines, lighted by electricity from the company's own electric works, and supplied with water from the company's own waterworks; he drives along the fine roads built by the company in the company's own motor-car, takes lunch at the company's restaurant, and, if unfortunate enough to fall sick on the way, is sure to be taken to one of the company's hospitals and accorded the best treatment to be expected under the circumstances, and all the time he is served by the company's men. Should, however, it be his lot to live in any part of the Railway Zone, he must conform to the rules set by the company, pay taxes to the company, and subject himself more or less to its controlling power. Here the company plays its part as master. This monopoly of all enterprises by one company has naturally evoked much criticism as tending to suppress individual activity. But those who know anything about the conditions of the Japanese traders, merchants, and so-called men of enterprise, who flocked to Manchuria after the Russo-Japanese War will only smile at the criticism. To say the least of it, they had little capital, and a conglomeration of small traders, retail shops, barbers, restaurants, and photographers, would never have made Manchuria as it is. It is rather through

the efforts of the South Manchuria Railway Company that individual enterprises on a solid foundation, of which there are so many now, have come to exist in Manchuria. The question now is whether the South Manchuria Railway Company must still continue a Jack-of-all trades, or whether it would not be better for Manchuria as a whole, and especially for the healthy development of the Japanese community there, for it to give up some of its less important undertakings, and devote its whole energy to those which no institution of lesser importance could ever undertake with success.

CHAPTER V

AGRICULTURE

Introductory observations on Manchurian agriculture; Agricultural division of Manchuria; Agricultural area; Population; Labour; Soil; Agricultural products; Soya beans; *Kaoliang*; Millet; Maize; Wheat; Barley; Buckwheat; Rice; Hemp, Jute, and Flax; Tobacco; Cotton; Wild silk; Stock-farming.

Introductory Observations on Manchurian Agriculture :—When we spoke of the economic development of Manchuria in the preceding chapters, we were actually speaking of its agricultural development. We have already seen how, by the immigration of Chinese from the south, the virgin soil of Manchuria saw for the first time a serious attempt made on it to turn it to account, how, by the opening of Newchwang,¹ the great basin of the Liao² was turned into a great agricultural field, how the two wars fought on its soil contributed to the development of the country by introducing its products to foreign markets, notably to those in Japan, and finally how, by the perfection of transportation facilities, the rich products of Manchuria began to figure in the world trade. These and very many other things already recorded will enable our readers to follow the course of the agricultural development of

¹ Newchwang (牛莊). ² Liao (遼河).

Manchuria. Our attention in this chapter will therefore be mainly confined to its actual conditions, reference being made to former conditions only when such reference is desirable to elucidate the matters on hand.

Widely different views are entertained as to the possibilities of Manchuria as a field of agricultural enterprises. Undoubtedly, they are immensely greater than those of mountainous Japan or Korea, but to liken them to those of the great agricultural regions found in North and South America seems to have no ground. The soil is not in general so rich, and in many places has been much exhausted, nor is the area of arable land so extensive, nor the climate so moderate. One great advantage it has had over most other countries in Eastern Asia is the comparative thinness of its population, but this advantage is fast being diminished by the constant influx of Chinese immigrants from the South, and it seems but a question of time for the country to be just as much overpopulated as any of the other parts of China. All these things taken into consideration, Manchuria is yet the most favoured spot for agriculture in the Far East, and its opportunities may well be termed "immense", which epithet is often met with in Japanese publications on Manchuria.

That great mass of level land, extending over the whole of Central Manchuria and comprising the basins of the Liao,¹ Sungari,² Nonni,³ and Hulan,⁴ the productiveness of which can compare favourably with any part of Japan or Korea, is by itself as large as the whole of the Chosen Peninsula or of the mainland of Japan, and, to those who know how

1 Liao (遼河). 2 Sungari (松花江). 3 Nonni (嫩江). 4 Hulan (呼蘭).

little of level land there is in these two countries that is really arable and actually under cultivation, it will not be at all difficult to imagine the wonder in which the two peoples look upon this apparently boundless extension of rich field. An American gentleman with whom the author had the honour of travelling in Manchuria ejaculated, as the train was drawing near to Mukden,¹ "This is exactly what we see in America," as though relieved at seeing something homelike after a long journey through apparently endless chains of rugged mountains in Japan and Chosen.

Agricultural Division of Manchuria:—Manchuria may be divided into four parts according to its physical configuration and distribution of arable lands. These are: (1) South Eastern portion; (2) South Western portion; (3) Central portion; (4) Northern portion.

1. The chief features of the South Eastern portion, which comprises the whole basin of the Yalu² and the Liaotung Peninsula,³ are its prominent mountains and, in general, sandy and sterile soil with its mixture of gravel. The Japanese leased territory of Kwantung⁴ is very hilly and the soil is especially poor. But, since it is the most densely populated portion of Manchuria, every inch of arable land, even the hill side and the river bed, is under cultivation. The same condition prevails more or less in other parts of this portion with the exception of the districts along the upper reaches of the Yalu,² where there are still left some lands yet to be cultivated.

2. The South Western portion, which comprises the

¹ Mukden (奉天). ² Yalu (鴨綠江). ³ Liaotung Peninsula (遼東半島). ⁴ Kwantung (關東).

entire basin of the Liao,¹ is level, and generally well suited for agriculture. The whole region is well cultivated, and, with the exception of some districts along the upper reaches of the river and those adjacent to Mongolia, there is little room left for further exploitation. Some parts of this portion are quite rich, though others, especially along the sea coast and the low lands, have a soil that is sandy and sometimes saline. What is most deplorable in connection with this portion is the lack of proper drainage systems, some districts along the lower Liao, once the best agricultural fields, being already in part deserted on account of repeated inundations.

3. The Central portion, which occupies the middle part of Manchuria watered by the River Hurka² and the upper and middle reaches of the Sungari,³ is unquestionably the best agricultural region in Manchuria. Especially are the lands around Changchun,⁴ Kirin,⁵ and Harbin exceedingly rich, and moreover there is still plenty of room for further exploitation. As a matter of fact, it is in this region that the most wonderful development has taken place in agriculture in recent days.

4. The Northern portion, which comprises the whole of the northern region watered by the lower Sungari,³ the Nonni,⁶ and the Amur,⁷ is generally rich in soil, though being so sparsely populated it is not as yet much developed. But its possibility is immense.

On the whole, it may be said that the best farm lands in Manchuria are not found in South but in North Manchuria.

1 Liao (遼河). 2 Hurka (牡丹江). 3 Sungari (松花江). 4 Changchun (長春). 5 Kirin (吉林). 6 Nonni (嫩江). 7 Amur (黑龍江).

Yet the single province of Mukden¹ in South Manchuria contains as much as 8,418,398 acres, or more than half the total acreage of the cultivated land in Japan.

Agricultural Area.—The acreage of the land under cultivation in Manchuria is estimated, according to the Kwantung² Government, at 21,598,921 acres, consisting of 8,699,012 acres in the province of Mukden,¹ 7,977,843 acres in Kirin,³ and 4,922,066 acres in Amur,⁴ while, according to the South Manchuria Railway Company's estimate, the total acreage is 22,580,250 acres, consisting of 11,233,800 acres in Mukden,¹ 7,594,650 acres in Kirin³ and 3,751,800 in Amur.⁴ The following table prepared by the Kwantung² Government shows the total and cultivated area of each province, and how those are distributed among the inhabitants.

Province	Population	Total Area	Area under Cultivation	Ratio of Cultivated Land to Total Area	Land under Cultivation per Head
		Sq. Miles	Acres	%	Acres
Mukden ¹ ...	11,669,232	83,544	8,699,012	16.0	0.75
Kirin ³ ...	5,620,023	95,733	7,977,843	13.0	1.42
Amur ⁴ ...	1,997,622	204,715	4,922,066	3.8	2.46
Total... ..	19,286,877	383,992	21,598,921	9.0	1.12

Remark:—The area and population of Kwantung² Province, and the population of the South Manchuria Railway Zone are not included in this table.

The following table is the one prepared by the South Manchuria Railway Company. It differs greatly from the above in its figures for the acreage under cultivation, but is

1 Mukden (奉天). 2 Kwantung (關東). 3 Kirin (吉林). 4 Amur (黑龍江).

highly instructive in that it gives the uncultivated arable area.

Province	Area under Cultivation		Uncultivated Area		Cultivated Area per Head	
	Acres		Acres		Acres	
Mukden ¹	11,233,800		3,134,700		0.938	
Kirin ²	7,594,650		3,910,050		1.347	
Amur ³	3,751,800		4,575,600		1.503	
Total	22,580,250		11,620,350		1.122	

By the "uncultivated area" given in the above table is meant that which may readily be turned into farm lands, all the conditions required for that purpose being taken into consideration. It shows that over two-thirds of the arable land of Manchuria is already under cultivation. The absurdity of comparing the agricultural possibilities of Manchuria with those of the North or South American plains will be clear from this alone. As to acreage per head, the table shows that it is 0.94 acres in Mukden,¹ 1.35 acres in Kirin,² and 1.5 acres in Amur,³ and that the whole of Manchuria averages 1.12 acres. It constantly enlarges as one goes North, thus showing the respective agricultural development of the three provinces, and, taken as a whole, the acreage per head is twice as large as that in Korea which averages 0.612 acres. This explains why Manchurian farming is conducted more "extensively" than Korean farming, which is, in its turn, more extensive than the Japanese. As a matter of fact, in the densely populated districts around Mukden¹ the intensive method, such as prevails in China proper, is said to be followed. All this

1 Mukden (奉天). 2 Kirin (吉林). 3 Amur (黑龍江).

naturally suggests the question of population, which we shall now proceed to consider.

Population :—The Manchurian population amounts in all to 20,112,100 according to the best authority, while its density is 133 per square mile in Mukden,¹ 63 in Kirin,² and 12 in Amur³ Province, with the average for the whole country of 53 per square mile. This will show at once that Manchuria is not so sparsely populated a country as it is generally believed to be. Let us look for a moment at that of other countries according to censuses taken between 1910-1915.

Countries	Population per Sq. Mile	Countries	Population per Sq. Mile
England and Wales	618	Sweden... ..	32
Belgium	589	U.S.A.	31
Japan (Mainland)...	374	Chili	11
Italy	313	Argentine	6
Scotland... ..	160	Australia	2
Ireland	135	Siberia	2
European Russia...	68		

The above table will show that the population per square mile in Mukden¹ Province is about the same as that in Ireland, that of Kirin² Province a little smaller than that of European Russia, and that in Amur³ Province nearly the same as Chili, while the average population per square mile for all Manchuria at 53 is far larger than that of the United States, in which the average density is only 31 per square mile. All this will serve to show that Manchuria is already well inhabited, and does not leave so much room for

1 Mukden (奉天). 2 Kirin (吉林). 3 Amur (黑龍江).

further immigration as is generally believed. On the other hand, its population is increasing by leaps and bounds, as may be seen from the following table which is compiled on the basis of Chinese official reports.

Province	Population		Increase	Average yearly increase	Percentage of average yearly increase
	1906	1916			
Mukden ¹ ...	8,763,148	11,804,241	3,041,930	304,193	3.47
Kirin ² ...	3,047,077	5,736,611	2,689,534	268,953	8.82
Amur ³ ...	1,455,657	2,098,819	643,162	64,316	4.41
Total ...	13,265,882	19,639,671	6,374,626	637,462	4.80

According to the above, no fewer than six million were added to the population of Manchuria during the period of ten years ending 1916, showing that the average yearly increase is about 4.8 per cent. Japan's population is increasing yearly at the rate of about 1.4 per cent., and that of the United States, with all its immigrants, at only 1.9 per cent. Manchuria is swelling its population 3.4 times as fast as Japan, and 2.5 times as fast as the United States. Computed, as they are, on the returns by native authorities, it is impossible to say how far the above figures may be relied upon, but one thing seems certain, that the Manchurian population is increasing very fast, surpassing in speed most new countries in the world, and it is quite natural that it should be so, seeing that the most densely populated country in the world, China proper, is but next door to it, and Manchuria has every inducement for Chinese home-seekers.

Labour.:—The question of population naturally suggests

¹ Mukden (奉天). ² Kirin (吉林). ³ Amur (黑龍江).

that of labour. No traveller who has been in Dairen¹ in February or March can have failed to notice the tens of thousands of Shantung² coolies pouring out from the steamers and hurrying north by every train leaving the port, and he may probably have wondered whether this denoted shortage of labour in Manchuria or abundance. The truth is the Manchurian farmer by himself is unable to deal with the land he has taken up, and labour is yearly imported from the northern provinces of China proper, especially Shantung² and Chili,³ to till, sow, and reap, and it is said that no fewer than 300,000 coolies enter Manchuria every year. But even this enormous amount of labour does not seem to be of much account when scattered all over Manchuria, where no machinery whatever is used in agriculture, and everything has to be done by hand. Thus the Manchurian agricultural method remains "extensive" to this day. To assist human labour, however, large numbers of horses, donkeys, mules, and oxen are employed with commendable dexterity. These cattle are useful to a Manchurian farmer in many ways. They assist him to plough, sow, and harvest during the warmer seasons, and, when the icy hand of winter hardens the roads, they are employed in pulling those heavy carts, by means of which the crops of the interior are conveyed to more convenient spots, thence to be forwarded to their destination by vessel or by train.

Soil :—Widely different views are entertained as to the soil conditions of Manchuria. Some speak very highly of them, while others do not. But there seems no doubt that,

1 Dairen (大連). 2 Shantung (山東). 3 Chili (直隸).

with the exception of Kwantung¹ Province and other mountainous districts, the soil is generally rich, and especially is it so in the great valley of the Sungari,² of which Harbin forms the centre. The question is, are the people, by the agricultural method now in vogue, actually receiving to the full the benefits which Nature has bestowed upon them, or are they, as often asserted, not only wasting such benefits to a great extent but also exhausting the soil through their foolishness? In one of the publications of the Chinese Maritime Customs we read :

“ But when the Manchurian farmer pulls out the whole plant by the roots, or, having cut the crop with his sickle, proceeds to cut up the roots with a mattock for fuel, he is preventing the work of the *bacillus radicola* from bearing its fruit and depriving his land of the provision made for it by Nature. Thus, the soil in South-west Manchuria, where agriculture has been carried on for 400 years, has been bereft of all vegetable and organic matter and no longer bears harvests. The wonderful natural loaminess of the soil in the newer regions further north—for instance, at Shwangchengpu,³ where it is said that no manure is or ever has been used by the farmers in the 40 years since the land has been cultivated—this loaminess will assure good harvests for many years to come ; but in the course of time even the richest soil will become exhausted, and to prevent such a disaster steps should be taken to inform the ignorance of the peasants who are at present deriving such great profits from their

1 Kwantung (關東). 2 Sungari (松花江). 3 Shwangchengpu (雙城府).

crops. If they could be shown the value of the process of 'turning under' the green bean plants after the harvest, the fertility of the land might be preserved."

Again, in the "Geographical and Economic Survey of China" compiled by the Far Eastern Geographical Establishment it is stated as follows :

"The method of tillage is very crude. In spring the farmer shovels up, with his primitive plough, five or six inches of earth into a ridge ; on this he drops the seeds, and then rolls the ridge. The richness of the crop is due to the remarkable fertility of the soil and is in spite of the methods of the farmer. The present methods, it has been pointed out, actually diminished the value of the soil. They deprive the soil of humus, and there is no crop rotation. This condition is aggravated by the continual raking away of the stubble for fuel, thus depriving the soil of organic matter, while the scarcity of animals make the price of manure prohibitive."

All this is very true, with the exception of an item respecting the rotation of crops, for this means of preserving the vitality of the soil is quite often resorted to by Manchurian farmers. Many Japanese authoratative works on Manchuria assert so and Sir Hosie's work has the following :

"The above are the eight cereals grown in Manchuria, and, where farming is carried on on a small scale, tall millet [*kaoliang*] is sown for two or three years on the same soil. After several years, however, it is found that the grain decreases in quality, and a change of crop becomes necessary. On large farms, on the other hand, a certain rotation, such as the following, is adopted :

1st year	Millet,
2nd year	Beans,
3rd year	Rice, barley, or wheat,
4th year	Millet,
etc."	

But manure is seldom used, except in raising vegetables, and it is also quite true that in many places the soil has become so exhausted that the yield is steadily diminishing. But such is the fertility of the soil that, in spite of this grossly extensive method, the yield is by no means small as compared with Japan and Korea.

By way of ascertaining these facts, an experimental agricultural station of the South Manchuria Railway Company caused in 1916 and 1917 some dozen farmers in the neighbourhood of Szupingchieh¹ and Kungchuling² to cultivate native seeds of soya beans according to the purely native method, and the result was in 1916, 4.104 bushels, and in 1917, 3.727 bushels per *tan* (0.245 acres). Now the average bean crop in Korea is about 2.978 bushels, and that in Japan 4.02 bushels per *tan* (0.245 acres), which in fact means that the Manchurian farmers, with all their extensive methods, are reaping the same amount of crop from their lands as the Japanese get from theirs, where intensive methods are carried to the extreme, allowance being made, however, that in Japan the farmer does not generally devote his best land to bean cultivation.

Agricultural Products.—Of the cereals and pulse which Manchuria produces the principal are beans, *kaoliang*, and millet, and these are followed by maize, sorghum,

¹ Szupingchieh (四平街). ² Kungchuling (公主嶺).

buckwheat, wheat, rice, and peas. Among other products are sesamum seeds, hemp, flax, jute, tobacco, and cotton. The amount of production of these agricultural products is hard to ascertain owing to the absence of reliable statistics, but for cereals and pulse the official statistical report for 1915 on agriculture and commerce gives the following.

Kind		Mukden ¹ Bushels	Kirin ² Bushels	Amur ³ Bushels	Total Bushels
<i>Kaoliang</i>	... ..	162,052,691	13,264,633	8,174,492	183,491,816
Maize	... ..	22,511,696	8,992,419	5,925,211	37,429,326
Millet	... ..	12,312,303	6,730,855	11,462,635	30,505,793
Beans	... ..	39,217,693	17,663,030	17,164,111	74,044,834
Beans, Small	...	7,015,543	2,119,188	1,492,544	10,627,275
Beans, Other	...	1,315,886	609,925	251,140	2,176,951
Barley	... ..	3,276,847	7,118,797	17,642,844	28,038,488
Wheat	... ..	4,702,600	11,334,736	9,263,998	25,301,334
Oats, etc., etc.	...	995,432	928,350	3,545,612	5,469,394
Rice	... ..	6,057,613	1,350,239	—	7,407,852
Total	... ..	259,458,304	70,112,173	74,922,587	404,493,064

It is difficult to say how much reliance can be placed on these figures, but below we give other statistics, also for 1915, worked out by the South Manchuria Railway Company, for which the export of these products as given in the Customs returns is made the basis of calculation.

Kind		South Manchuria Bushels	North Manchuria Bushels	Total Bushels
Beans	... ..	79,109,647	29,672,569	108,782,216
Cereals	... ..	226,570,587	97,707,098	324,277,685
Total	... ..	305,680,234	127,379,667	433,059,901

1 Mukden (奉天). 2 Kirin (吉林). 3 Amur (黑龍江).

A comparison of these two tables will show that in the total amount the figures in the latter table are larger than the former by about 29 millions of bushels, but as millet, sorghum, buckwheat, and other cereals are not included in the former table, whereas they are in the latter, it may be said that the two tables almost agree with each other, at least in their totals. Only in the amount of bean production is there a substantial difference, about 35 millions of bushels, but, in the case of beans, we may take the company's figures as the more correct, since beans and their products are mostly exported, and, since the company's figures are based on the export returns, it must have some good ground for arriving at the figures it gives. At any rate, the total amount of cereals and pulse, which form the main agricultural products of Manchuria, must be somewhere between 404 and 433 millions of bushels. It is nearly three times as large as that of Korea which, for 1917, produced only 146,986,239 bushels. A brief description of the principal agricultural products of Manchuria will now be given in the pages following.

Soya Beans :—(1) Importance of Beans and Their Products: It is only in the last decade that soya beans have figured in the world trade, and their rapid rise in importance has, indeed, been one of the most remarkable commercial events of recent times. It was the soya bean that introduced Manchuria into the trade comity of the world, and it is still the soya bean that makes Manchuria famous. So predominant is the position of the soya bean and its products, bean oil and bean cake, in the Manchurian trade, that these three articles now constitute nearly one-half

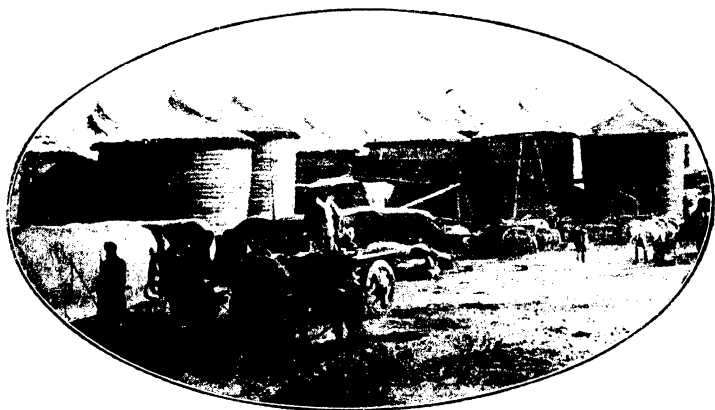
the value of the entire exports of the country. Sir Alexander Hosie called them, as early as 1899, "the wealth of Manchuria." They are indeed the wealth of Manchuria, which has been growing ever since the time of Sir Alexander, and is still growing. Without the "three articles," by which term beans, bean cake, and bean oil are collectively called by the Japanese, the Manchurian trade would, at a stroke, shrink to one-half its present amount, not only in export but most probably in import also, for experience has shown that Manchuria seldom buys more than it sells. The trade importance of soya beans will be described later on; our attention here will be confined to their agricultural side.

(2) Cultivation of Soya Beans: Soya beans have been cultivated in Manchuria from very early times, and some indeed go to the length of saying that they once grew wild there. At any rate their cultivation was very limited in those early days, being only enough to supply local demands. Even as late as some sixty or seventy years ago, though they were already exported to China, Java, and the South Sea Islands, their importance was far inferior to that of *kaoliang*. Thanks, however, to the extension of their markets to Japan, Europe, and America, their production increased by leaps and bounds, and to-day there is no place in Manchuria where they are not more or less cultivated.

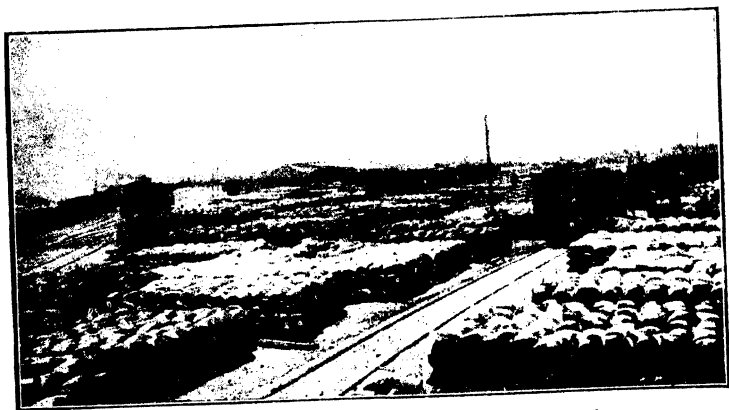
While soya beans have thus risen from obscurity to the position of first importance in the Manchurian trade, little or no change has been introduced in the manner of their cultivation, or in the method by which they are prepared for the market. To summarize the process, the seed is sown in April, and when the plant appears the earth is



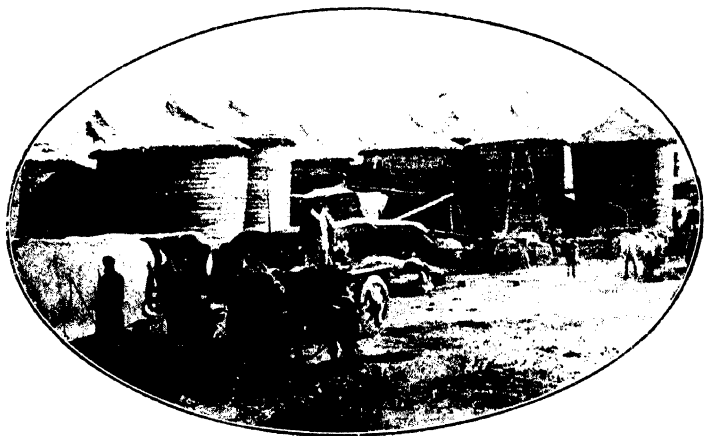
Soya bean field



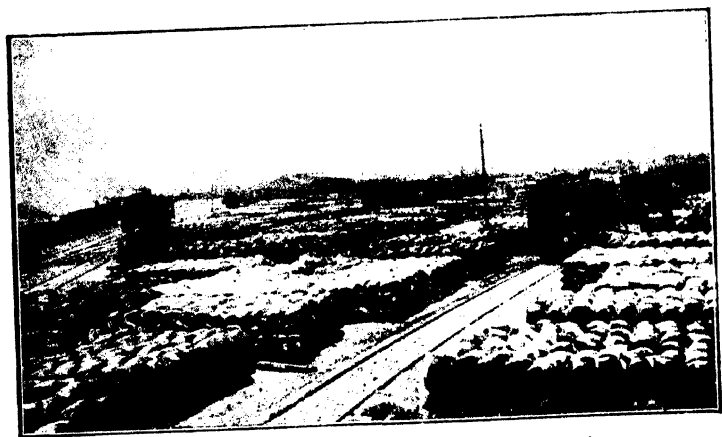
Piles of soya beans in the open air, Kaiyuan (開原)



Soya beans awaiting shipment on Dairen (大連) wharves



Piles of soya beans in the open air, Kaiyuan (開原)



Soya beans awaiting shipment on Dairen (大連) wharves

heaped up around it, so that the roots may derive the maximum of nourishment from the soil. The harvest takes place in September. The plants are pulled by hand or cut with a straight-bladed sickle, and collected into small heaps in order to facilitate drying, and, when dry, the seed is separated by means of a cylindrical stone roller which is dragged over the plants by a mule as they lie on the threshing floor. The beans are then winnowed in the usual Chinese method, that is, by throwing them against the wind. After this they are packed, loaded on the heavy carts drawn by mules, characteristic of Manchuria, and carried to the nearest market place to be disposed of. With labour still so cheap, the use of more costly machines may not be advisable, or hardly possible under present circumstances.

(3) Amount of Production : The amount of production of soya beans for each of the three provinces of Manchuria, and the districts in which more than 300,000 *koku* (1,488,780 bushels) are produced are given below :

Provinces	Principal Districts	Amount of Production Bushels	Total Bushels
Mukden ¹	{ Shenyang, ² Liaoyang, ³ Faku, ⁴ Hailung, ⁵ Tungfeng, ⁶ Hsifeng, ⁷ Hsian, ⁸ Huaite, ⁹ Lishu, ¹⁰ Tiehling ¹¹ }	52,477,445	102,701,992
Kirin ¹²	{ Ningan, ¹³ Changchun, ¹⁴ Panshih, ¹⁵ Yushu, ¹⁶ Pinhsien, ¹⁷ Kirin ¹² }	33,809,060	
Amur ¹⁸	Hailun, ¹⁹ Suihua, ²⁰ Payen, ²¹ Hulan ²²	16,415,487	

Remark :—Statistics by Mukden¹ Chamber of Commerce.

1 Mukden (奉天). 2 Shenyang (瀋陽). 3 Liaoyang (遼陽). 4 Faku (法庫). 5 Hailung (海龍). 6 Tungfeng (東豐). 7 Hsifeng (西豐). 8 Hsian (西安). 9 Huaite (懷德). 10 Lishu (梨樹). 11 Tiehling (鐵嶺). 12 Kirin (吉林). 13 Ningan (寧安). 14 Changchun (長春). 15 Panshih (磐石). 16 Yushu (榆樹). 17 Pinhsien (賓縣). 18 Amur (黑龍江). 19 Hailun (海倫). 20 Suihua (綏化). 21 Payen (巴彥). 22 Hulan (呼蘭).

Thus it will be seen that the best bean field is found to the north of Mukden¹; and Changchun,² Kaiyuan,³ and Harbin are the three greatest centres of the bean trade north of Dairen.⁴ This is further proved by the fact that, of the 974,000 tons of beans brought down to Dairen⁴ during 1917 by the South Manchuria Railway, 863,000 tons or nearly 90% came from districts to the north of Mukden.¹ The amount of soya beans produced in Manchuria, as estimated by both the Chinese authorities and the South Manchuria Railway, has already been given. It is 108,782,216 bushels according to the company's estimate, believed by us to be the more correct of the two, amounting in value at Yen 2.82 a bushel, the recent average price of the commodity, to the enormous sum of Yen 306,765,849. It is further estimated that about three-fourths of this total production is exported, and of the total export, about 30 per cent. is in the form of beans, and the rest in the form of bean cake and oil. The beans are mostly exported to China and Japan, bean cake mostly to Japan, and bean oil mostly to Europe and America.

(4) Different Species: The soya beans of Manchuria are divided into three classes according to colour—yellow, green, and black. The yellow is further sub-divided into the *chinyuan*⁵ or round golden bean, the *paimet*⁶ or white eyebrow, so named from the whiteness of the hilum or scar marking the point of attachment to the pod, and the *heichi*⁷ or black navel, so called from the dark brown hilum.

The green bean, which is the same as the yellow one

1 Mukden (奉天). 2 Changchun (長春). 3 Kaiyuan (開原). 4 Dairen (大連). 5 *chinyuan* (金元). 6 *paimet* (白眉). 7 *heichi* (黑臍).

in shape and size but different in colour (this difference in colour however almost disappears with the lapse of time), has two sub-varieties—the one having a green skin and yellow interior, and the other being green both inside and out. The black bean or *wutou*¹ has three sub-varieties—the *tawutou*² or large black bean, having a black skin and green interior; the *hsiaowutou*³ or small black bean, the inside of which is yellow; and the *pienwutou*⁴ or flat black bean with yellow inside. There is also a great number of sub-species differentiated from each other by some minute peculiarity.

The chemical composition of each kind above mentioned, according to the analyses made in Central Laboratory in Dairen,⁵ is as follows:

YELLOW BEAN

Kind	Composition					
	Moisture	Albumin-oids	Fat	Carbo-hydrates	Fibre	Ash
	%	%	%	%	%	%
White eyebrow ...	9.78	37.23	19.37	24.03	5.11	4.39
Round golden ...	9.70	37.74	19.33	24.41	5.05	4.79
Black navel... ..	10.09	37.51	19.64	23.12	5.11	4.53
Average ...	9.88	37.49	19.44	23.85	5.09	4.25

GREEN BEAN AS COMPARED WITH THE YELLOW BEAN

Kind	Composition					
	Moisture	Albumin-oids	Fat	Carbo-hydrates	Fibre	Ash
	%	%	%	%	%	%
Green bean	9.90	36.58	18.24	19.31	11.67	4.30
Average composition of yellow bean	9.88	37.49	19.44	23.85	5.09	4.25

1 *wutou* (烏豆). 2 *tawutou* (大烏豆). 3 *hsiaowutou* (小烏豆). 4 *pienwutou* (扁烏豆). 5 Dairen (大連).

From the above analyses it will be seen that there is not much difference between the various kinds of yellow beans, and the common belief in the inferiority of the black navel to other species belonging to the same class has little foundation. At the same time the fact is made clear that the green bean is considerably inferior in quality to the yellow.

(5) Uses of the Soya Bean: As articles of trade, soya beans take three principal forms, soya beans as they are, bean cake, and bean oil. Bean cake is the residue after the oil has been expressed from the beans. The uses of each of the three articles will be described below.

(6) Uses of Beans, Bean Cake, and Bean Oil in the Far East: (a) Beans: Perhaps the Japanese are the greatest consumers of beans in the world as an article of diet. Every morning they take soup made of *miso* which is prepared from beans. For the seasoning of their food they seldom use salt, using instead bean sauce, the chief ingredients of which are beans and salt. Thus the Japanese eat beans in one form or another at least three times a day. An extensive use is also made of beans by the Chinese, who make them into the Chinese paste *chiang*¹ which they habitually eat with fish, meat, and vegetables. But the more expensive Chinese soy, which corresponds to the Japanese *shoyu*, is only used by wealthy families and restaurant keepers, and is not consumed by the very poor. Another product of beans which is widely used in both Japan and China is *ton-fu* or bean-curd.

(b) Bean Oil: Bean oil is extensively used in cook-

¹ *Chiang* (醬).

ing. Although it is inferior to rape and sesamum oils for this purpose, these oils cannot compete with it in point of price; the recent advance in price, due to the foreign demand, may however—if sustained, as seems certain—go far to change the positions of the oils relatively to each other. In spite of its unpleasant characteristic odour and unpalatability, the poorer classes in China consume it in its crude state, but among the rich it is boiled and allowed to stand until it has become clarified.

As a lubricant bean oil is used for greasing axles and parts of the native machinery in use in the arts and crafts. Other uses in South China are for the making of waterproof cloth, and paper umbrellas and lanterns, and the oil is also mixed with lacquer for the manufacture of varnish and printing ink.

(c) Bean Cake: Bean cake, which is but the residue after the oil has been expressed from the beans, was of comparatively little value to the Manchurian farmers, who used to feed their stock with it, before the discovery of its great value as a fertilizer. First in the sugar plantations in the provinces of Fukien¹ and Kwangtung,² and then in the plantations in Java and the South Sea Islands, it was used as a fertilizer, and for centuries it has been an important article of trade with those places. But the great importance it has since attained in Manchuria's foreign trade dates from the conclusion of the Chino-Japanese War, when it began to be exported to Japan for use in the paddy fields there. Soon it was found that it possessed fertilizing qualities superior to those of the fish manure of past ages which, containing too

1 Fukien (福建). 2 Kwangtung (廣東).

high a proportion of oil for the purpose for which it was used, was liable to breed insects hurtful to the crops, and so great grew the demand for it in Japan that the relative position of the oil and the cake was changed at one time, the cake becoming the principal product and the oil a by-product, though the tendency now is for the oil to regain its former position, owing to the growing demand for it in the Western markets. The results of the analyses made of bean cake in three different places show the following chemical composition :

Analysis by	Composition					
	Water %	Albumin- oids %	Fat %	Carbo- hydrates %	Fibre %	Ash %
Government Laboratory, Japan	11.0	45.2	5.2	25.9	6.5	6.2
Agricultural Institute, Scotland	12.2	41.5	8.7	28.7	3.8	5.0
South Manchuria Railway Company	15.3	42.1	9.6	21.9	5.3	5.4

The Chinese farmer does not yet use bean-cake in his rice field, and in Manchuria it is only used for vegetable-growing. Thus Japan owes much to the Manchurian bean-cake for the productiveness of its naturally sterile soil.

As cattle feed bean cake is used in Manchuria for horses and mules—only, however, when very hard work is being done, and is mixed with bran and *kaoliang* stalk. Its use as cattle feed in Japan still belongs to the experimental stage. Two novel uses of soya beans have been discovered by Mr. Suzuki of the Central Laboratory of the South Manchuria Railway Company. The one is the

making from it of a new sort of paint, named *solight*, and the other, a chemical composition called *tantalse*, which imparts its waterproof characteristic to the cement, mortar, or concrete with which it is mixed, or to paint upon which it is applied. A joint-stock company was established in Dairen¹ to manufacture these articles in 1912, and it is now doing a prosperous business. The merits of *solight* are enumerated thus : it may be applied as it is ; it dries quickly, that is, in about half an hour ; it has no bad odour like paint ; its easy combination with any colour ; its cheapness.

Beans are also used in soap-making, and there are already several soap factories in Dairen¹ which use beans as the chief material. The uses of beans are studied by many Japanese institutions and individuals, and many new discoveries have been made ; indeed there seems to be no end to their uses.

(7) Uses of Beans and Their Products in Europe and America : Some of the uses are described in a very valuable work by Mr. Norman Shaw of the Chinese Maritime Customs, "The Soya Bean of Manchuria" (1911) from which the following is taken :

"In Europe the consumption of soya beans as a food stuff is small proportionately to their other uses. Refined bean oil may be used as a salad dressing in place of other oils (but, owing to its unpleasant odour, is usually mixed with an oil of animal origin or with rapeseed oil), or in the manufacture of margarine, when a greater percentage of soya oil than of copra oil is allowed.

"According to a series of articles in the journal

¹ Dairen (大連).

'Milling' experiments have been made with soya beans blended with both flour and meal, the proper proportion having been thereby ascertained to be one-fifth for mixing with flour and one-sixth for mixing with meal. Thus blended, the soya imparts a pleasant flavour and, being exceptionally rich in albuminoids, it gives a considerable increase in food value (soya beans are nearly three times as rich in albuminoids as oats and wheat). German millers are experimenting with the beans in the attempt to brown bread by mixing with rye flour. But the best use to which they can be put is undoubtedly for making biscuits, for there is no difficulty, as in the case of bread, in getting a loaf which shall not be heavy and sticky; the biscuits are crisp and nourishing, and the oil in which the beans are so rich is not so detrimental to biscuits as to bread. In any case, as soya flour cannot be bleached, it is unsuitable for white bread making. The peculiar flavour of the beans is appetizing on account of the casein contained in them. A minor advantage is that the loaf cuts quite clean, without crumbs, and the only disadvantage is that the top of the loaf easily breaks away, thus showing that the rich albuminoids of the soya flour have not the qualities of the white flour. There may be a great future before soya meal (the residue when the oil is extracted by a chemical process), for brown bread is gaining in popularity, many people preferring the highly flavoured brown loaf, and it has only failed to attract more generally because of the poor quality turned out by bakers. It can not be doubted that, if pains were taken, the use of brown bread would spread; and soya flour, by reason of the large proportion of albuminoids,

phosphates, and casein it contains, may be the very blend required to bring brown bread up to that degree of favour which may extend its use very largely.

“French culinary ingenuity has even, according to reports received, employed the bean as a substitute for coffee beans.

“One of the principal uses to which bean oil is applied in Europe is in soap manufacturing, for which purpose it can be made use of in its crude state. The scarcity of cotton seed oil in recent years has forced manufacturers to find a suitable oil as an alternative, and bean oil, at an attractively low figure, was largely resorted to. It can not be said, however, to approach cotton seed oil in quality, for it is not so uniform in character and is liable to become rancid.”

A recent publication in Manchuria mentions that bean oil is now used in Europe in the manufacture of dynamite and other explosives, soap, candles, linoleum, margarine, dye-stuffs, waterproof appliances, toilet powder, etc.

The export of beans, bean cake, and bean oil from Dairen,¹ Newchwang,² and Vladivostok for the past ten years are as follows :

Article	Year	Dairen ¹	Newchwang ²	Vladivostok	Total
Beans	1908	485,579	101,737	244,574	917,890
	1909	383,293	147,555	283,676	714,524
	1910	275,349	149,824	379,375	804,538
	1911	189,041	97,824	399,482	686,347
	1912	141,750	85,316	361,298	588,364
	1913	182,112	74,309	355,344	611,665
	1914	354,691	108,698	465,011	928,390
	1915	140,884	91,847	343,152	575,883
	1916	205,553	56,016	296,794	558,363
	1917	286,405	41,101	172,855	500,361

1 Dairen (大連). 2 Newchwang (牛莊).

Article	Year	Dairen ¹	Newchwang ²	Vladivostok	Total
Bean Cake	1908	298,249	316,473	9,515	624,237
	1909	214,086	280,886	2,152	497,124
	1910	440,936	358,492	5,138	804,566
	1911	477,832	262,316	6,024	746,172
	1912	530,818	277,038	12,567	820,423
	1913	509,470	212,520	14,516	736,506
	1914	697,961	281,184	41,719	1,020,304
	1915	652,814	172,595	76,689	902,098
	1916	825,761	191,658	73,073	1,090,493
	1917	977,822	121,189	50,587	1,149,598
Bean Oil	1908	10,208	10,382	60	20,650
	1909	14,748	10,001	—	24,749
	1910	32,635	9,447	16	42,098
	1911	35,955	16,740	—	52,695
	1912	42,550	7,987	—	50,537
	1913	41,520	4,321	—	45,841
	1914	79,647	3,806	—	83,453
	1915	97,099	4,559	2,543	104,201
	1916	107,457	4,155	—	111,614
	1917	204,450	2,172	—	206,622

Remarks:—The year in this table comprises one export season extending from November 1 of the year mentioned to October 31 of the next. The quantity is in short tons.

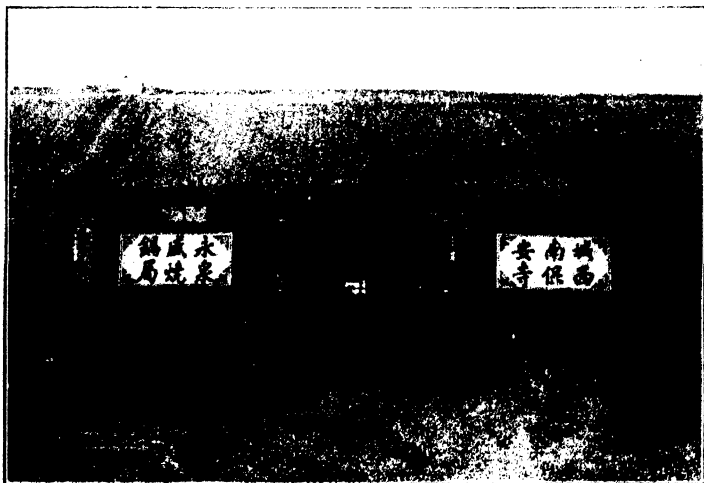
Kaoliang:—Apart from its tradal value, *kaoliang* or tall millet may be considered even more important than soya beans, in that it is the staple food of the native population, and the principal grain food of the numerous animals engaged in the farm-work and in the immense carrying trade of the three provinces.

Before soya beans attained their present importance, half the total area of the cultivated land in Manchuria was devoted to *kaoliang*, and a large amount of it was export-

1 Dairen (大連). 2 Newchwang (牛莊).



Kaoliang field



Chinese brewery

ed to other provinces of China. Of late, however, the cultivation of *kaoliang* has given place to that of beans in many places, so that at present, in the northern part of South Manchuria, where beans are cultivated most extensively, about 50 per cent. of the whole cultivated area is devoted to beans, and only 20 to 30 per cent. to *kaoliang*. Its annual production in Manchuria is estimated at about 183,000,000 bushels. It is said that 8 pounds of seed suffice to sow an acre of land, producing in good years 10 to 12 cwt. of grain. In a bad year or on poor soil, only a third of this quantity will be harvested. The crop is easily affected by climatic and soil conditions, and for this reason its cultivation is confined chiefly to Mukden¹ Province, and in that province, too, it does not grow well in the Liaotung² Peninsula or in the mountainous south-east.

Kaoliang is not only used as a food-stuff for man and beast in Manchuria, but the native spirit is also made out of it. Nor are the grains the only useful part of it; the stalks play a very important rôle in Manchuria. The outer leaf layers are woven into mats, so much required in the trade of the country, for roofing ricks and packing loads of grain and beans, and for numerous other purposes. The stalks are also utilized for fencing, bridging, and housebuilding, and where wood and coal are unobtainable or dear they are used for fuel.

Kaoliang spirit,³ extensively used in both Manchuria and Mongolia, is colourless and transparent, and possesses a strong flavour, which peculiarly appeals to the taste of the

1 Mukden (奉天). 2 Liaotung (遼東). 3 *Kaoliang* spirit (燒酒).

natives. Its annual production is estimated at 1,965,000 gallons or even more, valued at Yen 20,000,000.

Kaoliang used to be an article of home consumption, and its market outside Manchuria was at most confined to China proper, but after the outbreak of the European War a trial shipment was made to Europe as grain food for horses, and being successful it has since continued to be exported. It is also exported to Japan, and the demand for it there is constantly increasing. The total export of it in 1917 amounted to Hk. Tls. 5,655,000.

Millet :—As the staple food of the native population millet is next only to *kaoliang*, and in North Manchuria, where *kaoliang* does not prosper, it is the main food of the inhabitants. It is also important as material for distilling native spirit, while its straw is universally used for fodder. Millet is cultivated throughout Manchuria, but more largely in North than in South Manchuria. In South Manchuria, the country around Haicheng¹ is reputed for the quality of the millet produced there. The country around Liaoyang² and Mukden³ also produces good millet.

Its importance as an article of trade is growing, the export of it in 1917 being in value about Hk. Tls. 2,000,000. Its chief market is Chosen, where it is used as a substitute for rice.

Maize :—Maize or Indian corn is grown in Manchuria in the same way as tall millet. Seventeen pounds of seed, it is said, are required to sow an acre which will yield 8 to 10 cwt. of grain. It is divided into two species according to the colour of its grain—yellow and white. It is the

1 Haicheng (海城). 2 Liaoyang (遼陽). 3 Mukden (奉天).

yellow maize that is cultivated more extensively. A great advantage derived from its cultivation lies in the fact that it grows well where other crops fail; naturally it is found much in the level and fertile regions but in south-eastern Manchuria including Kwantung¹ Province, which is mountainous and of poor soil. In these districts it enters largely into the food of the people, taking in fact the place of *kaoliang* or millet of more fertile provinces. The roots, stalks, and empty cobs are used for fuel, and one not infrequently notices empty cobs utilized as corks or stoppers for narrow-necked wine jars. The white maize may be milled and mixed with wheat flour without changing the taste of the latter, so long as the amount of the mixture does not exceed about 10 per cent. It may also be mixed with *kaoliang* as material for native spirit. Maize occupies the ground from April to June only, and, like barley and wheat, admits of an autumn crop being taken from the same soil. Its export amounted in 1917 to Hk. Tls. 1,600,000.

Wheat :—North Manchuria is an ideal wheat field, and wheat is there grown in considerable quantities. The best wheat fields are found around Ningan,² Petuna,³ and Harbin, along the right bank of the Sungari,⁴ and in the country around Suiwha.⁵ In South Manchuria wheat fields are mostly found around Hsifeng⁶ and Hailung,⁷ and the country lying to the west of the Liao,⁸ while Tiehling⁹ has one of the largest flour-mills in Manchuria. There were in 1916 some 24 mills in Harbin and at other places. Wheat has been

1 Kwantung (關東). 2 Ningan (寧安). 3 Petuna (伯都訥). 4 Sungari (松花江). 5 Suiwha (綏化). 6 Hsifeng (西豐). 7 Hailung (海龍). 8 Liao (遼河). 9 Tiehling (鐵嶺).

cultivated in South Manchuria from very early times, but the production has never been large enough to admit of its export. On the contrary, it is still an importer of wheat flour. In North Manchuria, however, its production increased with great rapidity, stimulated, as it was, by the demand of the Russians, both civil and military, who came to settle or were stationed there in large numbers. Record has it that in 1896 the annual production of wheat did not exceed 36 million pounds, whereas in 1906 it amounted to 902 million pounds. The decrease in the local demand for it after the Russo-Japanese War, by reason of the withdrawal of the Russian troops, naturally encouraged its export to the Russian Amur¹ and Ussuri regions. Its export in 1917 through the different Customs in North Manchuria is shown in the following table :

Customs								Quantity	Value
								Piculs	Hk. Tls.
Aigun ²	...	...	...	...	...	...	...	2,313	5,419
Sansing ³	...	...	...	...	...	...	...	308,319	570,390
Harbin	...	...	...	...	...	...	...	7,710	12,644
Manchouli ⁴	...	...	...	...	...	...	...	344,958	600,227
Suifenh ⁵	...	...	...	...	...	...	...	901,337	2,086,312
Total	...	...	...	...	...	...	...	1,564,637	3,275,992

The yearly export of it from 1914 to 1917 is shown in the following table :

Year	Quantity	Value	Year	Quantity	Value
	Piculs	Hk. Tls.		Piculs	Hk. Tls.
1914	... 1,939,393	2,774,688	1916	... 1,089,008	2,045,829
1915	... 1,434,918	3,865,333	1917	... 1,564,637	3,275,992

1 Amur (黑龍江). 2 Aigun (愛珥). 3 Sansing (三姓). 4 Manchouli (滿洲里). 5 Suifenh (綏芬河).

Barley :—The cultivation of barley in large quantities dates from the Russo-Japanese War, when the demand for it was called forth by the Japanese army in Manchuria as the grain food for horses. It is now cultivated in considerable quantities around Changchun,¹ Kungchuling,² Liaoyang,³ and Haicheng.⁴ It is used by the natives as food and as feed for their animals. It is also used as a ferment in the distillation of native spirit. But its annual production as estimated by the Chinese authorities elsewhere given seems altogether too much. In an official publication of the Kwantung⁵ Government it is given at 10,668,000 bushels.

Buckwheat :—Buckwheat is an autumn crop which requires only two and a half months to ripen, being sown in July and harvested in September. It is often sown after wheat, or takes the place of other crops when these fail on account of drought or excessive rainfall, so that one harvest at least may be secured from the soil. The custom obtains to sow it on land newly reclaimed, in the belief that it has the effect of improving the soil. It is ground into flour and made into a kind of macaroni, baked into cakes, or boiled to make gruel.

Rice :—Rice in Manchuria is not cultivated in paddy fields as in other countries but is grown on dry land like other cereals. Though remote in origin, the production has never been very large, for the Chinese in Manchuria do not care much for it, and do not use it except on rare occasions such as big dinners and festivals. The demand being limited, the supply has never been very great. That

¹ Changchun (長春). ² Kungchuling (公主嶺). ³ Liaoyang (遼陽).
⁴ Haicheng (海城). ⁵ Kwantung (關東).

demand is now fast growing owing to the entry of the Japanese into Manchuria, and, just as the Russian entry in the North stimulated the cultivation of wheat, that of the Japanese in the South is encouraging rice-cultivation there. The cultivation of wet-rice was first undertaken by the Korean immigrants, then it was followed by the Chinese, and to-day many Japanese are engaged in the cultivation of it along the railway lines, and the development has been so rapid that the total production is now estimated at 1,488,780 bushels a year. Some opine that when rice-cultivation in Manchuria is fully developed there will no longer be any food question in Japan.

Hemp, Jute, and Flax :—Hemp is grown in all the three provinces of Manchuria, while jute is cultivated only in Mukden¹ and Kirin² and flax only in Amur³ Province. There is no means of ascertaining the production of these different species of textile plants but the Chinese statistics for 1915 give the following :

Province				Hemp Lbs.	Jute Lbs.	Flax Lbs.
Mukden ¹	...	...	...	31,281,813	12,360,673	—
Kirin ²	...	...	...	6,046,654	2,290,010	—
Amur ³	...	...	...	45,257,016	—	107,104,68

The amount given for Amur³ Province seems to be far too large, but since we have no data to check it we must leave it as it is. In that province, hemp plants are for the most part cultivated for the seed, from which oil is extracted.

1 Mukden (奉天). 2 Kirin (吉林). 3 Amur (黑龍江).

Flax is also cultivated in that province for the same purpose. The production of the seed in the three provinces in 1915 was estimated at 11,534,116 lbs. for Mukden,¹ 20,461,762 lbs. for Kirin,² and 817,410,054 lbs. (again considered too big) for Amur³ Province. Hemp plants cultivated for seed are not as a rule utilized for fibre, or, if they are, the yield is of a very poor quality. It is chiefly in South Manchuria that hemp and jute are grown for fibre. These are differently cultivated. Some are cultivated for the double purpose of seed and fibre. The best hemp, white and tenacious, is produced around Hailung⁴ and Hsifeng⁵ in Mukden¹ Province, and is generally woven into cloth, while one next to it in quality is produced in Pinhsien⁶ and Ningan⁷ in Kirin² Province, and this is generally made into thread. One of ordinary quality is mostly made into nets and ropes, and the worst part is used for paper-making. Jute is less flexible than hemp, but because of its waterproof nature is used in the making of bags, ropes, nets, and string, and various shipping and fishing tackles. In 1916 a joint-stock company was formed in Dairen⁸ with a capital of Yen 1,000,000 for the purpose of manufacturing hemp bags, utilizing the Manchurian hemp and jute, and aided by Indian jute. According to this company Manchuria produces about 12,200,000 English pounds of jute annually. Both jute and hemp are exported, but the amount is exceedingly small, that of hemp for 1917 being Hk. Tls. 33,247 and that of jute Hk. Tls. 71,186.

1 Mukden (奉天). 2 Kirin (吉林). 3 Amur (黑龍江). 4 Hailung (海龍). 5 Hsifeng (西豐). 6 Pinhsien (賓縣). 7 Ningan (寧安). 8 Dairen (大連).

Tobacco.—Tobacco is one of the staple products of Manchuria and is exported to both China and Siberia. The best leaf is raised around Kirin.¹ The Manchurian tobacco leaf is stated by foreign experts to be of excellent quality, but owing to its strength is hardly suitable for cigarettes without first blending with foreign leaf. The British American Tobacco Company has a factory in Mukden² in which it manufactures great quantities of cigarettes from the Manchurian leaf, the bulk of which is purchased in Kirin.¹ The Toa Tobacco Company also has a factory in Newchwang.³ The native leaf is exported, and the amount is yearly increasing as shown in the following table :

Port	1914		1915		1916		1917	
	Piculs	Hk. Tls.	Piculs	Hk. Tls.	Piculs	Hk. Tls.	Piculs	Hk. Tls.
Suifengho ⁴	345	3,890	142	890	—	—	37	589
Harbin ...	1,131	6,786	1,429	16,033	2,023	21,848	1,443	13,131
Antung ⁵ ..	300	6,000	309	4,919	1,527	5,179	284	3,888
Dairen ⁶ ...	9,627	90,397	9,502	94,806	10,498	104,858	25,556	230,004
Yingkow ⁷	1,029	13,405	564	9,814	886	10,025	3,287	41,261
Others ...	117	758	41	314	64	404	1,994	16,946
Total	12,549	121,236	11,987	126,776	14,978	142,314	32,601	305,819

On the other hand, the import of foreign and Chinese leaf also amounts to considerable quantities for use in making cigarettes. The amount is shown below :

Year	Quantity								Value
	Piculs								Hk. Tls.
1914	16,768	387,836
1915	25,925	484,345
1916	39,518	587,480
1917	44,287	690,061

1 Kirin (吉林). 2 Mukden (奉天). 3 Newchwang (牛莊). 4 Suifengho (綏芬河). 5 Antung (安東). 6 Dairen (大連). 7 Yingkow (營口).

Cotton :—Cotton is grown only in the region lying to the south of a line drawn between Tiehling¹ and Kangping,² comprising the districts of Kaiping,³ Haicheng,⁴ Liaoyang,⁵ Shenyang,⁶ Tiehling,¹ Penhsi,⁷ Faku,⁸ Kangping,² Heishan,⁹ Peichin,¹⁰ Ihsien,¹¹ Chinh sien,¹² Chinhsi,¹³ and Chaoyang.¹⁴ Cotton in Manchuria was originally cultivated on a very small scale by the farmer for the use of his own household, and it was only around Liaoyang⁵ and Chinh sien¹² that cotton was brought to the market as an article of trade; yet the quantity was very small. The industry was further discouraged by the importation of cheap foreign cotton goods consequent on the opening of the railways, and it was not until very recently that it showed some signs of revival stimulated by the high price quoted for the staple since the outbreak of the European War.

Country around	Amount of Production	Country around	Amount of Production
Liaoyang ⁵	1,719,640	Chaoyang ¹⁴	529,120
Chinh sien ¹²	396,840	Others	346,574
Chinhsi ¹³	793,680		
Ihsien ¹¹	462,980	Total	4,248,834

Wild Silk :—The cultivation of wild silk was introduced by immigrants from Shantung¹⁵ Province toward the end of the 18th century, and the town of Kaiping³ was noted as a market for wild silk as early as one hundred years ago. The industry developed year by year, taking into the

1 Tiehling (鐵嶺). 2 Kangping (康平). 3 Kaiping (蓋平). 4 Haicheng (海城). 5 Liaoyang (遼陽). 6 Shenyang (瀋陽). 7 Penhsi (本溪). 8 Faku (法庫). 9 Heishan (黑山). 10 Peichin (北鎮). 11 Ihsien (義縣). 12 Chinh sien (錦縣). 13 Chinhsi (錦西). 14 Chaoyang (朝陽). 15 Shantung (山東).

so-called silk region district after district, until it now comprises the whole country including in the south the Japanese leased territory of Kwantung¹ and in the north the towns of Kaiyuan,² Changtu,³ Hailung,⁴ Tunghwa,⁵ etc., in short, nearly all South Manchuria. Four districts, however, stand out prominently in this industry, and these are Kaiping,⁶ Haicheng,⁷ Siuyen,⁸ and Kwantien,⁹ all of which enjoy a special natural advantage for silk-worm raising, while the towns of Antung¹⁰ and Kaiping⁶ are known as the two largest centres of Manchurian silk. The following table shows the approximate number of farms in the principal districts.

Country around			Number of Farms	Country around			Number of Farms
Liaoyang ¹¹	...	...	170	Kwantien ⁹	...	...	2,527
Fuhsien ¹²	...	...	1,143	Kaiping ⁶	...	...	5,357
Antung ¹⁰	...	...	1,575	Fenghwang ¹³	...	...	663
Haicheng ⁷	...	...	561	Huanjen ¹⁴	...	...	51
Siuyen ⁸	...	...	770				

It is impossible to ascertain the quantity of wild silk cocoons produced in Manchuria with any exactitude in the face of the total absence of reliable statistics. It may however be conjectured from the amount of its export and of home consumption, and this process has led us to conclude that it must be, though fluctuating according to good and bad years, between 6,000 and 7,000 million cocoons in recent years. The following table showing the annual production of cocoons is also prepared by the same process.

1 Kwantung (關東). 2 Kaiyuan (開原). 3 Changtu (昌圖). 4 Hailung (海龍). 5 Tunghwa (通化). 6 Kaiping (義平). 7 Haicheng (海城). 8 Siuyen (岫岩). 9 Kwantien (寬甸). 10 Antung (安東). 11 Liaoyang (遼陽). 12 Fuhsien (復縣). 13 Fenghwang (鳳凰). 14 Huanjen (桓仁).

Year				Cocoons Export- ed in form of	Co- coons	Cocoons Con- sumed in	Total
				Wild Silk	Exported	Manchuria	Production
				Thousand	Thousand	Thousand	Thousand
1907	...	...	...	1,887,814	1,304,386	354,688	3,546,888
1908	...	...	...	4,308,426	1,592,207	655,625	6,556,258
1909	...	...	...	3,303,630	2,283,786	620,824	6,208,240
1910	...	...	...	2,647,100	1,891,364	504,373	5,042,737
1911	...	...	...	3,835,183	1,885,673	635,650	6,356,506
1912	...	...	...	4,342,737	2,010,456	705,910	7,059,103
1913	...	...	...	3,252,075	2,381,587	625,962	6,259,624
1914	...	...	...	2,718,031	1,809,227	503,028	5,030,286
1915	...	...	...	4,607,269	3,068,085	852,827	8,528,171

Remark:—The above figures are obtained on the presumption that one picul of wild silk needs 177,777 cocoons, or 90 *momme* of silk needs 1,000 cocoons, and 1,000 cocoons weigh 11 *kin*, and one picul of cocoons contains 9,091 and that the home consumption is 10 per cent. of the whole production.

Stock-farming:—Before the immigration of the Chinese from the south, the chief occupation of the original Manchus was the raising of stock, and in consequence stock-farming was greatly developed in those days. With the entry of the Chinese, the rich pastoral grounds which then covered the greater part of the country were converted one after the other into grain fields. Thus agriculture rose, but stock-farming waned. Yet even to this day a shadow of the old pastoral age is still visible on the Mongolian frontier and in the western part of Amur¹ Province, where the inhabitants are as yet devoted to the breeding of cattle. Besides, the Manchurian farmers generally keep large numbers of horses, mules, donkeys, and oxen, and it has already been observed how they are assisted by those animals in their farming and

¹ Amur (黑龍江).

carrying-trade. Pigs and sheep are also raised by them. In this, however, as in most other cases, it is impossible to gauge how many of them are in Manchuria, and the following, the only statistics available, should be taken with all proper reserve.

Kind				Mukden ¹	Kirin ²	Amur ³	Total
				Head	Head	Head	Head
Oxen	...	...	...	583,322	90,140	214,912	888,374
Horses	...	...	...	753,951	503,654	512,363	1,769,968
Mules	...	...	...	205,330	231,374	115,314	552,018
Donkeys	...	...	...	352,000	103,230	53,366	508,596
Sheep	...	...	...	429,095	94,285	62,748	586,128
Pigs	...	...	...	3,552,167	1,254,730	491,750	5,298,647

1 Mukden (奉天). 2 Kirin (吉林). 3 Amur (黑龍江).

CHAPTER VI

DEVELOPMENT IN MINING, FORESTRY, AND FISHERY

MINING :—General features ; Principal mineral products—gold, iron, coal ; Mineral products in general.

FORESTRY :—Manchurian forests in general ; Yalu¹ forests and their exploitation ; Afforestation in Kwantung² Province.

FISHERY :—Fishery in general ; Fishery in Kwantung² Province ; Institution for encouragement of fisheries ; Fresh water fisheries.

MINING

General Features :—Mining in South Manchuria seems to have quite a remote origin. Local tradition declares that the coal mine at Fushun³ was worked as early as the twelfth century, but its working was prohibited by the founder of the late Manchu Dynasty from a superstitious belief in *fengshui* (spirit of Nature). There were evidently some other mines once worked. But, except for some conspicuous ones, traces of their working have been entirely effaced by the elements, particularly by the landslides caused by the indiscriminate felling of trees once universally perpetrated throughout the country. It seems that most old mines were discovered during the course of this general deforestation, but this same action doomed the fate of the

1 Yalu (鴨綠江). 2 Kwantung (關東). 3 Fushun (撫順).

mines thus discovered since it deprived them of the fuel indispensable in mining. Even after the removal of the prohibitory law, every possible obstacle was laid wittingly or unwittingly in the way of mining exploitation, thus retarding the progress of an industry which otherwise would have become ere long one of the most important sources of wealth for the country.

Mining in the modern sense was first introduced into the country by the Russians, when they, jointly with the Chinese, undertook to work Fushun¹ coal mine. But real progress in the industry began with Japan's succeeding to the Russian privileges and handing them over to the South Manchuria Railway Company to work them. According to the Chinese authorities, there are nearly 600 mines in the two southern provinces, classified as follows :

Province		Coal	Gold	Silver	Copper	Iron	Lead	Others
Mukden ²	... ..	158	189	16	25	21	57	14
Kirin ³	... ..	55	45	5	3	5	3	2
Total	... ..	213	234	21	28	26	60	16

It remains to be seen how many of these mines are really workable, the figures apparently including every spot in which any metal is found in any quantity. But the following nine mines, the privilege of working which was granted to Japan by virtue of the Chino-Japanese Convention of 1915, will some day be worked on a scale more or less extensive, work on some of them being already started.

1 Fushun (撫順). 2 Mukden (奉天). 3 Kirin (吉林).

Province	Location	District	Kind of Mine
Mukden ¹	Newhsintai ³ ...	Pensi ⁹ ...	Coal
	Tien-shih-fukou ⁴ ...	do	do
	Shashung-kang ⁵ ...	Hailung ¹⁰ ...	do
	Tieh-chang ⁶ ...	Tung-hua ¹¹ ...	do
	Aititang ⁷ ...	Chin ¹² ...	do
	Anshanchan ⁸ and vicinity ...	Liaoyang ¹³ ...	Iron
Kirin ²	Chiapikou ¹⁴ ...	Huatien ¹⁶ ...	Gold
	Hungyao ¹⁵ ...	Kirin ² ...	Coal
	Shashung-kang ⁵ ...	Helung ¹⁷ ...	Coal and iron

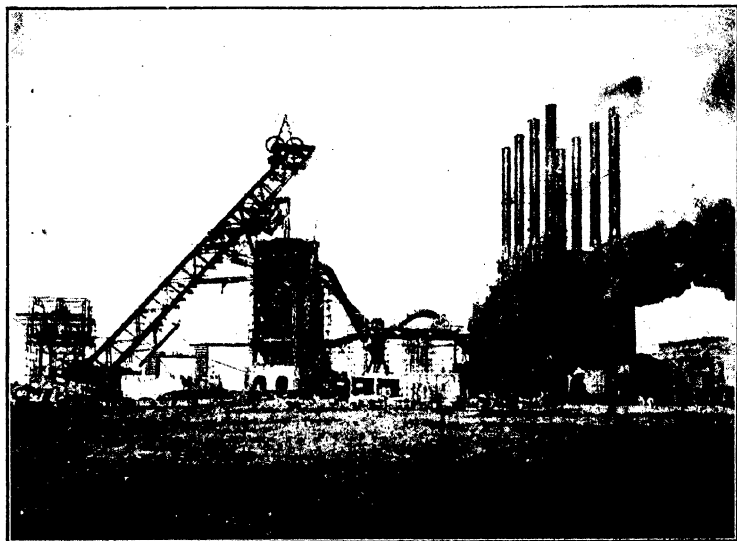
Principal Mineral Products.—Gold: The principal mineral products in Manchuria are gold, iron, and coal. Before the entry of foreigners and with them foreign capital into the Manchurian mining field, gold was practically the only metal that was extensively mined. Manchurian gold is mostly alluvial, and so can be mined with a very small capital. Naturally, all the river beds containing gold dust have been ravaged by gold hunters, and in South Manchuria it is only in their ruins that alluvial gold is now collected. Extensive traces of such mining are found in and around the regions of Hsingking,¹⁸ Tung-hua,¹¹ and Huanjen.¹⁹ It is asserted by experts that the alluvial gold of these regions came from gneiss which is abundantly found everywhere in Manchuria, and which always contains some gold. Beaten by the weather the gneiss disintegrated little by little, freeing the gold it contained, which washed by the rain deposited

1 Mukden (奉天). 2 Kirin (吉林). 3 Newhsintai (牛心臺). 4 Tien-shih-fukou (田什付灣). 5 Shashung-kang (杉松崗). 6 Tieh-chang (鐵廠). 7 Aititang (暖地塘). 8 Anshanchan (鞍山站). 9 Pensi (本溪). 10 Hailung (海龍). 11 Tung-hua (通化). 12 Chin (錦). 13 Liaoyang (遼陽). 14 Chiapikou (夾皮溝). 15 Hungyao (缸窩). 16 Huatien (樺甸). 17 Helung (和龍). 18 Hsingking (興京). 19 Huanjen (桓仁).

itself in the river beds. The beds, however, are not generally large in area, so are not fit for working on a large scale. The most extensive alluvial gold deposits in South Manchuria, not exhausted yet, are found along the tributaries of the Yalu¹ and the upper reaches of the Sungari² in the north-eastern part. But, on the whole, it may be said that gold no longer exists in any large amount in South Manchuria; it is in the North that it does. In Amur³ Province there are many gold fields where gold is still obtained in large amount. Especially are rich deposits found in the far north, on the right bank of the Amur.³ It was reported some time ago that an extensive alluvial gold deposit had been discovered on the banks of the Sungari,² and that no fewer than 6,000 to 7,000 people had entered that region in search of gold.

Owing to the entire absence of reliable statistics it is impossible to give figures as to the gold production in Manchuria. According to the South Manchuria Railway Company, during 1916 no less than 7 million yen worth of gold was brought to Harbin from the Amur³ districts, mostly through the towns of Aigun⁴ and Lope.⁵ The difficulty of ascertaining the amount of gold production in Manchuria is further aggravated by the fact that a considerable amount of the metal is brought across the Amur³ from the Siberian side of the river, in contravention of the law prohibiting any export of gold from Siberia. This violation of the Russian law appears to have been in practice a long time, seeing that it is mentioned in Sir Hosie's work on Manchuria published some 20 years ago. As to gold in Siberia, the Russian

1 Yalu (鴨綠江). 2 Sungari (松花江). 3 Amur (黑龍江). 4 Aigun (愛琿). 5 Lope (羅北).



Anshanchun (鞍山) Iron Foundry in course of construction



Fushun (抚顺) Colliery

authorities in East Siberia report that during 1914 the gold produced on the Siberian side of the Amur¹ alone amounted to 2,371,824 *monme* (285,971 ounces) valued at Yen 11,859,000.

Iron: Except coal, iron is undoubtedly the most important mineral product in Manchuria. Iron in Manchuria mostly exists in veins in metamorphic rocks, and the best veins are generally found in north-eastern Manchuria along the Yalu.² These were worked by the natives on a very small scale, in doing which, it is said, wood was used as fuel. The ores are generally hematite, and though the percentage of iron they contain is not large, being generally about 40 per cent., they are sufficiently rich to be worked with advantage. Two mines stand out prominently, Penhsihu³ and Anshanchan,⁴ the former produces about 50,000 tons annually, while the latter, though far more promising, produces little yet owing to the incompleteness of its plant.

Coal: At the present stage of mining development, coal is by far the most important mineral product in Manchuria, and the coal-mines at Fushun,⁵ Yentai,⁶ and Penhsihu¹ are well known.

Classified according to the age of formation, Manchurian coal may be divided into three classes, belonging respectively to the Carboniferous Period, the Jurassic Period, and the Tertiary Period. The coal belonging to the Carboniferous Period is mostly distributed in the Liaotung⁷ Peninsula south of Mukden.⁸ It is of anthracitous or

1 Amur (黑龍江). 2 Yalu (鴨綠江). 3 Penhsihu (本溪湖). 4 Anshanchan (鞍山站). 5 Fushun (撫順). 6 Yentai (煙臺). 7 Liaotung (遼東). 8 Mukden (奉天).

semi-anthracituous character, and is very often found in many layers. The best specimen of this kind is found in Penhsihu¹ coal, which is noted for its strong caloric power and adaptability for making the best of coke, while defects consist in it containing too much of sulphur and its over fragility. The coal belonging to the Jurassic Period is generally found in the northern part of South Manchuria. It contains much water, and having in character something in common with lignite is not suitable for making coke, moreover, the coal fields are too small to admit of working them on any large scale. The coal belonging to the Tertiary Period is exclusively found in the basin of the Hunho,² the greatest representative of it being the noted Fushun³ coal. It is bituminous, and containing, as it does, much volatile matter, is best fitted for the production of gas. It is also rich in nitric elements, its defects being too much of water and lack of cohesive power.

The following are the results of an analysis of Fushun³ coal made at the laboratory of the Natural History Museum, Hamburg, on Feb. 4, 1908 :

CERTIFICATE APPLIED FOR BY DR. PROF. GOTTSCHKE

Composition of Fushun Coal	Percentage	Percentage when water and ash have been extracted
Carbonic acid	72.58	78.75
Hydrogen	5.37	5.83
Sulphur	0.69	0.75
Nitrogen	1.31	1.42
Oxygen... ..	12.22	13.25
Water	6.48	—
Ash	1.35	—

1 Penhsihu (本溪湖). 2 Hunho (渾河). 3 Fushun (撫順).

The ash consist of salicic acid, oxidized iron, and clay. There are trace of lime, magnesia, and manganese.

ANALYSIS MADE AT LINDLEY & WEIGHELL.
LABORATORY IN BOMBAY

	%		
Moisture	2.34	Sulphur	0.36 %
Volatile Matter	38.31	Calories	7.54 %
Fixed Carbon... ..	56.58	British Thermal Units.	13,572
Ash... ..	2.77	Character of Coal ...	Coking
	—	Colour of Ash	White
Total	100.00	Specific Gravity... ..	1.282

The annual production of the three largest collieries in Manchuria is given below.

COAL

Year	Fushun ¹ Tons	Yentai ² Tons	Penhsihu ³ Tons
1912	1,470,150	43,104	126,071
1913	2,185,453	95,300	270,922
1914	2,147,432	96,815	298,793
1915	2,169,245	71,026	275,778
1916	2,039,578	91,645	322,635
1917	2,275,905	113,679	?

Mineral Products in General.—Besides the mineral products above mentioned, Manchuria produces silver, copper, and lead, but the veins of these minerals so far found are too small to admit of undertakings on any large scale. Talc, mica, asbestos, flour-spar, sulphur, nitre, soda, felspar, silica, and limestone are also found.

Though Manchuria thus seems to be stored with a

1 Fushun (抚顺). 2 Yentai (烟臺). 3 Penhsihu (本溪湖).

good many kinds of minerals in no small quantity, the mining industry there is yet in a very primitive condition. The Chinese have done very little in that direction, the capital of the Chinese companies operating the mines being said rarely to exceed Tls. 10,000. The Russians might have done something had circumstances allowed them, but, as it was, they had hardly begun their work when they had to leave it. What development it has witnessed has been chiefly accomplished by Japanese and Japanese capital. In this, too, as in many other matters in Manchuria, the name of the South Manchuria Railway Company towers high above other names, for the famous Fushun¹ and Yentai² collieries and the Anshan³ Iron Works are all worked by them. These enterprises by the South Manchuria Railway Company, together with the colliery and iron works at Penhsihu,⁴ a Chino-Japanese joint undertaking, are at present all the mining undertakings in Manchuria conducted according to modern methods on a large scale.

FORESTRY

Manchurian Forests in General :—Till several hundred years ago all the regions overrun by the Changpai⁵ and Khingan⁶ Mountains and their branches were thickly timbered, forming, as a Chinese Emperor expressed it “Seas of Trees.” Some of these forests have since been indiscriminately deforested, and what now remains of them is of little value as forests. For this the Chinese alone are not to be blamed, the Russians did at least as much harm

1 Fushun (撫順). 2 Yentai (煙臺). 3 Anshan (鞍山).
4 Penhsihu (本溪湖). 5 Changpai (長白). 6 Khingan (興安嶺).

as the Chinese by their wanton spoliation of forests without taking any steps to replenish them. But the silvan wealth of Manchuria is such that, in spite of all this, it still possesses many valuable forests, and these are mostly found in the mountainous north and east.

The following table prepared by the Civil Administrative Department of Kwantung¹ Province will give a rough idea as to the Manchurian silvan wealth, as well as to its distribution in the country.

Province	Location of Large Forests			Estimated Number of Trees Thousand	Estimated Dimension of Timber Thousand cubic feet
	Located by Mountain Ranges	Located by Rivers	Located by Districts		
Mukden ²	Sungling ³	—	{ Suichung, ⁴ Ningyuan, ⁵ Chinhsi, ⁶ Ihsien, ⁷ etc.	1,000	504,000
	Tailing, ⁸ Fenshui- ling, ¹⁰ Hamaling ¹²	—	{ Kaiyuan, ⁹ Fushun, ¹¹ Hailung, ¹³ Hsingking, ¹⁴ etc.	28,800	576,000
	Laoling ¹⁵	{ Right bank of the Up- per Yalu ¹⁶ River	{ Linkiang, ¹⁷ Tunghwa, ¹⁸ Liuho ¹⁹	14,400	288,000
	Lungskang ²⁰ Shamu- ling ²²	{ Right bank of the Mid- dle Yalu ¹⁶ River	{ Hwaijen, ²¹ etc.	16,200	324,000
	Total...	...	...	78,400	2,052,000

1 Kwantung (關東). 2 Mukden (奉天). 3 Sungling (松嶺). 4 Suichung (綏中). 5 Ningyuan (寧遠). 6 Chinhsi (錦西). 7 Ihsien (義縣). 8 Tailing (大嶺). 9 Kaiyuan (開原). 10 Fenshuiling (分水嶺). 11 Fushun (撫順). 12 Hamaling (哈嘛嶺). 13 Hailung (海龍). 14 Hsingking (興京). 15 Laoling (老嶺). 16 Yalu (鴨綠江). 17 Linkiang (臨江). 18 Tunghwa (通化). 19 Liuho (柳河). 20 Lungkang (龍岡). 21 Hwaijen (懷仁). 22 Shamuling (沙木嶺).

Location of Large Forests

Province	Located by Mountain Ranges	Located by Rivers	Located by Districts	Estimated Number of Trees Thousand	Estimated Dimensions of Timber Thousand cubic ft.
Kirin ¹	Changpai ² branch	{ Upper Sungari River ³	{ Mengchiang, ⁴ Huaitien, ⁵ etc.	21,400	468,000
	Hershan ⁶	{ Upper Hurka ⁷	{ Yenki ⁸ Tunhwa, ⁹ etc.	5,400	108,000
	Chang-kwang-sai ¹⁰	—	{ Kirin, ¹ Tunhwa, ⁹ etc.	21,600	43,200
	Hsiao Changpai ¹¹	{ Lalin River ¹²	{ Wuchang, ¹³ Changshow, ¹⁴ Pinhsien, ¹⁵ etc.	30,600	612,000
	Mukote-hengshan ¹⁶	{ Upper Sui-fenho, ¹⁷ Tumen ¹⁸	{ Hunchun, ¹⁹ Tungning, ²⁰ Ningan, ²¹ etc.	21,600	432,000
Total				100,600	1,663,200
Amur ²²	Small Khingan ²³	{ Hulan River ²⁴	{ Suihwa, ²⁵ Hailun, ²⁶ Yuking, ²⁷ etc.	720,000	14,400,000
	Great Khingan ²³	—	{ Aigun ²⁸ Nunkiang, ²⁹ Lungkiang, ³⁰ Hulun, ³¹ etc.	5,400,000	108,000,000
Total				6,120,000	122,400,000
Grand Total				6,299,000	126,115,200

1 Kirin (吉林). 2 Changpai (長白山). 3 Sungari River (松花江). 4 Mengchiang (濛江). 5 Huaitien (樺甸). 6 He-shan (黑山). 7 Hurka (牡丹). 8 Yenki (延吉). 9 Tunhwa (敦化). 10 Changkwangsai (張廣材嶺). 11 Hsiao Changpai (小長白山). 12 Lalin River (拉林河). 13 Wuchang (五常). 14 Changshow (長壽). 15 Pinhsien (賓縣). 16 Mukotehengshan (穆克特亨山). 17 Suifenho (綏芬河). 18 Tumen (圖們江). 19 Hunchun (琿春). 20 Tungning (東寧). 21 Ningan (寧安). 22 Amur (黑龍江). 23 Khingan (興安嶺). 24 Hulan River

From the above table it will be seen that the largest forests in Manchuria are found along the Great Khingan²⁵ Mountains, they alone embracing four-fifths of the whole of Manchuria's silvan wealth. But by far the greater part of these forests are as yet unexplored, and the above figures, though undoubtedly calculated on more or less tangible bases, must be taken with great caution.

The trees in these forests are mostly of the *pinus*, *quercus*, and *salix* families, the largest and most useful of them being pines, the circumference of which often reaches 13 to 14 feet, and the height more than 100 feet.

Yalu²⁶ Forests and Their Exploitation.:—The most celebrated of the Manchurian forests are those along both banks of the upper reaches of the Yalu,²⁷ of which the Korean side is exploited by the Forestry Undertaking Station of the Government-General of Chosen, and the Manchurian side by a Chino-Japanese Company called Ts'ai-mu-kung-ssu,²⁸ the largest firm in Manchuria of the sort.

The Ts'ai-mu-kung-ssu²⁹ was organized in 1908 with a capital of 3 million Chinese dollars³⁰ taken up equally by Chinese and Japanese with the purpose of exploiting the great Yalu³¹ Forests on the Chinese side, and has since been successfully engaged in felling, rafting, and preparing timber in those remote regions.

The annual amount and value of the timber handled by them is shown in the following table :

(呼蘭河). 25 Suihwa (綏化). 26 Hailun (海倫). 27 Yüking (余慶).
28 Aigun (愛珥). 29 Nunkiang (嫩江). 30 Lungkiang (龍江). 31 Hu-lun (呼倫). 32 Yalu (鴨綠江). 33 Ts'ai-mu-kung-ssu (採木公司).
34 Chinese dollars (北洋銀).

Year				Logs Rafted in the Year		Logs Sold or Deposited of Otherwise	
				Quantity	Value	Quantity	Value
				<i>Ren *</i>	<i>Hk. Tls.</i>	<i>Ren *</i>	<i>Hk. Tls.</i>
1910	...	...	...	862,467	1,471,879	762,467	1,307,579
1911	...	...	...	985,310	1,966,356	1,130,126	2,140,940
1912	...	...	...	856,285	1,639,487	941,469	1,821,923
1913	...	...	...	558,725	1,349,107	651,880	1,498,512
1914	...	...	...	1,725,949	3,222	1,467,812	2,802,234
1915	...	...	...	1,095,331	1,993,551	974,061	2,523,847
1916	...	...	...	1,667,206	3,378,758	1,927,133	3,713,135

Remark:—* By one *ren* is meant a log 8 feet long, irrespective of size in other respects. Thus logs of 16 feet are counted as 2 *ren* though in one piece.

Afforestation in Kwantung¹ Province:—Manchuria needs afforesting in many places as much as Chosen does. Hills and mountains now bare and barren but capable of being converted into fine forests to the benefit of the people, both from an economic and hygienic point of view, are visible everywhere. This is specially true in Kwantung¹ Province which is mountainous, yet with few trees on those mountains. Practically, no trees were seen in that region at the time when the administration of it was handed over to Japan, save for some few, mostly willow or elm, near villages and tombs. On the establishment of the Government-General of Kwantung¹ Province the matter was taken up, and, as an initiative step, nursery gardens were established at Port Arthur,² Chinchow,³ and Dairen,⁴ with an aggregate area of 100 acres, for the purpose of supplying saplings for the afforestation undertaken by the Government.

1 Kwantung (關東). 2 Port Arthur (旅順). 3 Chinchow (金州).
4 Dairen (大連).

Also, to encourage the general public in this useful undertaking, forest lands are rented free of charge to those desiring to afforest them, besides supplying them with seeds and young plants gratis. Regulations have also been published for the protection of forests. These measures have had the desired effect, and, with the increase in the interest taken in the public in the matter of afforestation, many nursery gardens owned by villages have been formed. Since 1912 a subsidy has been granted to these nursery gardens to encourage their establishment, and at present there are 26 of these local nursery gardens covering an aggregate area of 409 acres in the province, and the young plants supplied by them from the autumn of 1915 to the spring of 1916 numbered 10,650,000. The acreage afforested, and the number of young trees planted by the Government since 1905 are given in the following table :

Year	Acreage	Newly Afforested	For Supplementary Plant- ing in Existing Forests			Total	
		Young Trees Planted	Seeds Sown	Young Trees Planted	Seeds Sown	Young Trees Planted	Seeds Sown
	Acres		Bushels		Bushels		Bushels
1905 ...	172.94	504,830	—	—	—	504,830	—
1906 ...	153.33	355,610	8.42	301,640	—	657,250	8.42
1907 ...	343.53	765,721	30.77	84,850	.99	850,571	31.76
1908 ...	538.23	1,010,950	106.05	—	—	1,010,950	106.05
1909 ...	657.08	991,695	150.37	141,550	—	1,133,245	150.37
1910 ...	635.34	992,515	136.92	395,651	—	1,388,166	136.92
1911 ...	636.69	1,372,700	—	582,900	—	1,955,600	—
1912 ...	723.36	1,148,580	—	573,390	—	1,721,970	—
1913 ...	935.96	1,438,330	—	672,760	—	2,111,090	—
1914 ...	501.76	622,100	8.44	786,450	—	1,408,550	8.44
1915 ...	842.44	1,261,800	—	926,090	3.97	2,187,890	3.97
1916 ...	1,176.88	1,566,200	84.96	1,298,140	86.55	2,864,340	171.51
Total...	7,317.54	12,031,031	525.93	5,763,421	91.51	17,794,152	617.44

The trees planted are mostly pine, larch, acacia, and *kunugi* (*quercus serrata*).

FISHERY

Fishery in General.:—For native Manchuria, which has but a very short coast line, fishery can never figure much in its economy, even should the present amount of catch be doubled or trebled through the development of the industry. The following table compiled by the Chinese authorities some years ago is given in the absence of other statistics relative to the industry, though it gives but a very poor clue to its actual condition.

FISHERMEN AND FISHING BOATS (Kwantung¹ Province excepted.)

Adjacent Seas	Number of Fishermen		Fishing Boats
	Men	Women	
Liaoyang Bay ²	6,316	5,119	1,086
Yellow Sea ³	485	73	113

Fishery in Kwantung¹ Province.:—With the Yellow Sea³ to the east and the Gulf of Chili⁴ to the west, and a coast line of 500 miles, the leased territory of Kwantung¹ offers an ideal field for the fishing industry. The annual catch of fish there now amounts to nearly Yen 1,200,000 in value, and no fewer than some 6,000 families or 18,000 fishermen are engaged in it. They have increased in the past years as follows.

¹ Kwantung (關東). ² Liaoyang Bay (遼陽灣). ³ Yellow Sea (黃海).
⁴ Chili (渤海).

Year	Number of Families		Individuals	
	Japanese	Chinese	Japanese	Chinese
1912	107	5,559	129	13,512
1913	140	5,325	140	13,914
1914	129	5,677	118	16,642
1915	136	5,652	138	16,247
1916	118	6,183	162	15,475
1917	130	5,950	185	15,150

Remark:—Members of families not engaged in fishery are not included.

The fishery products which now amount to Yen 1,187,775 in value have increased for the past six years as follows.

Year	Japanese		Chinese		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
	Pounds	Yen	Pounds	Yen	Pounds	Yen
1912	5,120,100	290,590	11,833,571	422,542	16,953,671	713,132
1913	3,366,624	246,652	13,891,228	403,128	17,257,852	649,780
1914	2,712,258	247,746	14,697,966	376,466	17,410,224	624,212
1915	5,239,865	298,591	17,380,883	403,290	22,620,748	701,881
1916	10,564,188	464,997	17,402,263	467,888	27,966,451	932,885
1917	12,166,191	647,582	20,281,056	540,193	32,447,247	1,187,775

The fish that are mostly caught along the coast of the province are sea-bream, which in 1917 amounted in value to Yen 335,281, followed by cod at Yen 208,492, whales at Yen 218,400, and hair-tails at Yen 111,319.

Institution for Encouragement of Fisheries:—For the benefit of the fishing community the Kwantung¹ Government established an experimental station for fishery products in 1908 near Rokotan,² about one mile to the south of Dairen.³

1 Kwantung (關東). 2 Rokotan (老虎灘). 3 Dairen (大連).

The station is provided with factories, fishing gear, store-rooms, warehouses, and drying-chambers, and also with some yachts and boats to undertake experimental fishing and explore the adjacent seas. There is also an association which was organized as early as 1905, the principal purpose of which is to protect and develop the common interest of the fishing community. The association has now a membership of 7,532, of which 2,136 are Japanese and 5,396 Chinese.

Fresh Water Fisheries :—Fresh water fisheries are extensively conducted in all large rivers, notably in the Liao¹ and Yalu² in the south, and the lower reaches of the Sungari³ and its tributary the Hurka.⁴ It is said that the transactions in fishing products in the market of Sansing⁵ alone amount annually to ten thousand Chinese dollars. The fish consists mostly of salmon, salmon-trout, carp, wels, etc. The Sungari³ also produces pearls. At one time no fewer than 7,000 to 8,000 pearls annually are said to have been taken from that river in the neighbourhood of Kirin,⁶ but they do not appear to exceed 2,000 a year at present.

1 Liao (遼河). 2 Yalu (鴨綠江). 3 Sungari (松花江). 4 Hurka (牡丹江). 5 Sansing (三姓). 6 Kirin (吉林).

CHAPTER VII

MANUFACTURING INDUSTRY

General remarks ; Manufactures in Native Manchuria ; Manufactures in Kwantung¹ Province and Railway Zone ; Manufacturing products of Manchuria—(a) bean oil and bean cake, (b) distilling, (c) wheat flour, (d) iron, (e) silk, (f) timber, (g) sugar, (h) cement, and (i) salt ; Chemical industry ; Electricity ; Latest development in industry.

General Remarks :—Manchuria is as yet a country of raw material, its chief industry being agriculture and mining. Originally Manchurian manufacture consisted in the making of bean oil and flour, brewing, ceramics, dyeing, weaving, and tanning. These were conducted after the primitive native fashion, and it is only in recent years that factories conducted on a more or less modern method have made their appearance. As a manufacturing country, however, Manchuria may well be said to have every qualification. It has raw material in abundance in the form of agricultural, mining, and factory products, fuel in the form of coal, and excellent labour in the form of coolies. Moreover, with its large population within, and with China and Siberia on the south and north, it has markets easily accessible on all sides. What was wanted in it to make it a manufacturing country was men possessed of enough enterprising spirit and the necessary technical skill and knowledge, backed by sufficient capital. These men and capital were first supplied in North

¹ Kwantung (關東).

Manchuria by the Russians, and naturally it was there that manufacturing undertakings, conducted according to the modern factory system and in which machinery took a prominent part, were first established. These were in the line of flour-making, sugar-refining, and the preparation of timber. In a like manner, South Manchuria was opened up industrially by the Japanese and Japanese capital. Naturally, manufacture in its modern sense prospers most in and around Harbin in North Manchuria, and in Kwantung¹ Province, and in and along the South Manchuria Railway Zone in South Manchuria. But the Chinese, always alert to their interest, did not see the rise of new industries in the foreign concessions with folded arms, and Native Manchuria has also made considerable progress in recent years in this direction.

Manufactures in Native Manchuria:—An idea of the progress made in Native Manchuria as to manufacturing industries of the new type may be gathered from the following table taken from the Second Agricultural and Commercial Report of the Republic of China.

TABLE A.

Province	No. of Factories			Kind of Motor Power						Consumption of coal Ton	No. of Laborers		
				Steam		Electricity		Other					
	With motor power	Without motor power	Total	No. of engines	Horse power	No. of engines	Horse power	No. of engines	Horse power				
Mukden ²	65	1,015	1,080	56	880	—	—	10	94	33,609	37,564	122	37,686
Kirin ³	7	609	616	7	426	2	—	—	—	23,113	8,684	55	8,739
Amur ⁴	—	203	203	—	—	—	—	—	—	—	3,168	8	3,176
Total	72	1,827	1,899	63	1,306	2	—	10	94	56,722	49,416	185	49,601

Remark:—Only factories employing more than 7 workmen are taken into account.

1 Kwantung (關東). 2 Mukden (奉天). 3 Kirin (吉林). 4 Amur (黑龍江).

The factories given above are further classified according to the kind of manufacture in which they are engaged as follows :

TABLE B.

Kind of Industry	Mukden ¹		Kirin ²		Amur ³		Total	
	Facto-ries	Work-men	Facto-ries	Work-men	Facto-ries	Work-men	Facto-ries	Work-men
Weaving and dyeing...	208	4,104	55	754	—	—	263	4,858
Making of metallic and other tools	209	2,847	115	1,380	31	311	355	3,197
Making of oil, wax, paper, matches, etc..	231	3,795	53	749	41	638	325	5,182
Making of comestibles and beverages ...	163	3,552	234	4,100	101	1,924	498	9,585
Electricity	1	32	—	—	—	—	1	32
Others	268	23,356	159	1,747	30	303	457	25,406
Total	1,080	37,686	616	8,739	203	3,176	1,899	49,601

Their production is given as follows, in this all factories irrespective of the number of hands employed by them being included :

TABLE C.

Industry		Mukden ¹		Kirin ²	
		Quantity	Value	Quantity	Value
		Lbs.	\$	Lbs.	\$
Oil	{ Bean oil	34,702,151	4,614,870	16,618,068	1,806,371
	{ Hemp seed oil ...	1,551,470	264,944	1,983,865	397,060
	{ Other oil	227,612	30,237	105,759	201,068
Total		36,481,239	4,910,051	18,707,692	2,404,499
Liquor	{ Yellow spirit ...	668,595	78,760	446,347	37,558
	{ Kaoliang spirit ...	47,506,489	512,252	46,885,387	4,927,685
	{ Other spirits ...	33,241	4,238	37,144	13,447
		Doz. —		Doz. —	
Total		48,203,325	595,250	47,368,878	4,978,690
		Doz. —		Doz. —	

1 Mukden (奉天). 2 Kirin (吉林). 3 Amur (黑龍江).

Industry				Mukden ¹		Kirin ²	
				Quantity	Value	Quantity	Value
				\$	Lbs.	\$	Lbs.
Flour	{ Bean flour ...	7,320,845	672,588	5,002,102	408,718		
	{ Other flours ...	134,529	10,384	24,513,242	891,722		
Total		7,455,374	682,972	29,515,344	1,300,440		
Tobacco		583,119	98,595	2,772,549	264,238		
		Box 2,000		Box —			
Sugar		224,215	32,962	—	—		
Others		—	11,211,833	—	6,998,765		

Industry	Amur ³		Total		
	Quantity	Value	Quantity	Value	
	Lbs.	\$	Lbs.	\$	
Oil	{ Bean oil... ..	11,696,467	1,192,836	63,016,692	7,614,077
	{ Hemp seed oil	3,772,086	278,603	7,307,421	940,607
	{ Other oil ...	296,836	43,688	630,207	274,993
Total		15,765,389	1,515,127	70,954,320	8,829,677
Liquor	{ Yellow spirit	106,975	12,602	1,221,917	128,929
	{ Kaoliang spirit	20,169,380	2,030,022	114,561,256	7,469,959
	{ Other spirits...	1,058	48,985	71,443	66,670
		Doz. 5,320		Doz. 5,320	
Total		20,277,413	2,091,609	115,854,616	7,665,549
		Doz. 5,320		Doz. 5,320	
Flour	{ Bean flour ...	659,257	66,175	12,982,204	1,147,481
	{ Other flours ...	779,965	69,724	25,427,736	971,830
Total		1,439,222	135,899	38,409,940	2,119,311
Tobacco	... ..	5,449,711	1,030,860	8,805,379	1,393,693
		Box —		Box 2,000	
Sugar	... ..	10,582	800	234,797	33,762
Others	... ..	—	2,619,878	—	20,830,476

Remarks:—The value is in Chinese dollars.

Manufactures in Kwantung⁴ Province and Railway Zone:—It is in these two portions that new manufactures

1 Mukden (奉天). 2 Kirin (吉林). 3 Amur (黑龍江). 4 Kwantung (關東).

have made the most conspicuous progress of late. The safety of life and property resulting from Japanese rule, the easy access to the transportation system, and various other facilities offered for new enterprises have naturally tended to create this condition. If Manchuria as a whole may justly be called an agricultural country in every sense of the word, the condition prevailing in these two portions is altogether different from other portions. Industrialism has already got hold of them, and the tendency is ever increasing.

The following tables based on the statistical returns of the Kwantung¹ Government-General will give some idea as to the progress so far made within the jurisdiction of Japan in Manchuria.

FACTORIES IN KWANTUNG¹ LEASED TERRITORY (1917)

Town	No. of Factories	Capital Yen	Number of Workers			Value of Products Yen
			Japan- ese	Chin- ese	Total	
Port Arthur ² ...	25	350,375	30	155	185	221,007
Dairen ³ ...	108	35,404,996	3,249	9,714	12,963	56,619,784
Chinchou ⁴ ...	28	43,840	—	202	202	98,061
Pulantien ⁵ ...	14	151,250	3	133	136	255,386
Pitzuwo ⁶ ...	41	177,200	—	184	184	1,118,765
Total... ..	216	36,127,661	3,282	10,388	13,670	58,313,003
Year						
1912	204	22,424,192	—	—	—	22,246,852
1913	202	20,357,630	—	—	—	23,534,072
1914	187	20,936,561	—	—	—	14,454,438
1915	198	21,784,865	—	—	—	27,697,647
1916	204	33,628,496	—	—	—	43,137,839
1917	216	36,127,661	—	—	—	58,313,003

1 Kwantung (關東). 2 Port Arthur (旅順). 3 Dairen (大連).
4 Chinchou (金州). 5 Pulantien (普蘭店). 6 Pitzuwo (貔子窩).

FACTORIES IN RAILWAY ZONE (1917)

Town	No. of Fac- tories	Capital	Number of Workers			Value of Products
			Japan- ese	Chinese	Total	
		Yen				Yen
Wafangtien ¹	... 17	95,300	1	184	185	530,812
Liaoyang ²	... 10	448,486	209	1,510	1,719	1,223,211
Mukden ³	... 12	10,673,500	138	446	584	323,790
Penhsihu ⁴	... 10	7,055,380	93	652	745	15,120,526
Fushun ⁵	... 14	5,313,500	118	1,388	1,506	2,241,566
Kaiyuan ⁶	... 10	306,950	—	261	261	1,215,179
Changchun ⁷	... 20	4,064,750	42	580	622	3,978,928
Szupingchieh ⁸	... 5	108,000	6	598	604	352,697
Kungchuling ⁹	... 6	53,400	2	188	190	631,540
Antung ¹⁰	... 11	680,500	122	1,326	1,448	2,312,613
Yingkow ¹¹	... 1	55,479	—	9	9	96,000
Tiehling ¹²	... 1	1,000,000	6	40	46	1,620,000
Total	... 117	29,855,245	737	7,182	7,919	29,646,862
Year						
1912	... 41	2,448,265	—	—	—	3,681,381
1913	... 53	4,009,131	—	—	—	4,386,513
1914	... 57	3,600,269	—	—	—	6,344,758
1915	... 71	11,593,676	—	—	—	9,773,849
1916	... 92	16,722,531	—	—	—	11,666,113
1917	... 117	29,855,245	—	—	—	29,648,862

Little is known of the Russian section of Manchuria, owing to the disturbed condition prevailing in their home country and Siberia, but one of the publications on Manchuria gives the following figures for January, 1916.

1 Wafangtien (瓦房店). 2 Liaoyang (遼陽). 3 Mukden (奉天). 4 Penhsihu (本溪湖). 5 Fushun (撫順). 6 Kaiyuan (開原). 7 Changchun (長春). 8 Szupingchieh (四平街). 9 Kungchuling (公主嶺). 10 Antung (安東). 11 Yingkow (營口). 12 Tiehling (鐵嶺).

Industry	No. of Factories	No. of Laborers
Flour	12	591
Oil	13	720
Distilling	8	139
Vodka and Alcohol	7	283
Cigarettes and cigarette paper ...	3	190
Iron	1	100
Sugar	1	400
Glass	1	25
Mineral water and ink	2	31
Soap	2	11
Wool washing	5	?
Tannery	2	?

Manufacturing Products of Manchuria.:—The most important manufacturing industries of Manchuria are naturally based on its agricultural products, and these are followed by those based on mining and forestry products. Thus the manufacture of bean oil, bean cake, and wheat flour, and the distilling of native spirit are the principal industries; next in order comes the manufacture of iron, timber, and silk. Of late the manufacture of sugar, and certain kinds of chemical industry have gained some importance and may be added to the list.

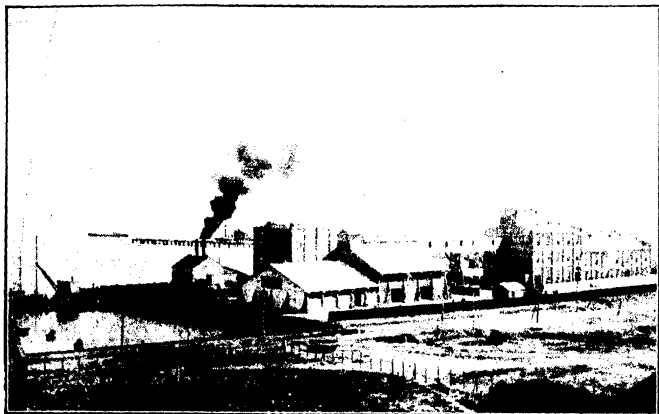
(a) Bean Oil and Bean Cake: The industry has a very remote origin and we have it on record that, as early as 1860, Swatow,¹ a port in South China, imported from Manchuria bean cake to the amount of 379,009 piculs, valued at \$783,762 (Chinese). Sir Alexander Hosie's work on Manchuria gives a minute description of the process of its manufacture, which, as far as most native factories are concerned, still holds good in its essential points. The factory

¹ Swatow.

is called *yufang*¹ or oil-mill and is found almost everywhere in Manchuria.

Two methods obtain for manufacturing bean oil or bean cake, both meaning the same thing as far as process is concerned, the bean cake being the residue of the beans after the oil has been squeezed out, or extracted, and hardly of less importance than the oil itself. One method is the time-honoured one of squeezing out the oil from the beans after steaming by pressure, of which Sir Alexander gives a very detailed description in his book. This method is still in vogue in most of the native factories and has scarcely had any alterations made in it; it is also the one followed in principle by most of the Japanese. But with them steam power is made use of, and the work is done on a far larger scale, so that the chief difference between the new and old method lies in the difference in motor power applied to the work. The bean cake made by this method is round in form, 46 *kin* (60.85 lbs.) a piece being considered the standard weight. The defects of this method are that an extraction of only 60 to 65 per cent. of the oil contained in the beans is possible, and much water is left in the cake, which is consequently of inferior quality as manure, and liable to spoil on the way to Europe or America. To some extent a remedy to this has been found by making the cake thinner, 26 to 18 *kin* (34.39 to 23.81 lbs.) in weight, but even this only brings the percentage up to barely over 70 per cent. A decidedly new method has lately been invented. By this method, which is called the extraction system, the beans are soaked in benzene until the oil in them is dissolved by it.

¹ *yufang* (油房).



Suzuki Bean Oil Factory in Dairen (大連)



Casks of bean oil awaiting shipment
on Dairen (大連) wharves

Then, by heating the compound, the oil is separated from the benzene. By this method nearly all the oil in the beans is extracted, and not only is there no waste of oil, but the residue, in this case not in the form of cake but in bulk, is better fitted for manure, since the small quantity of oil remaining in it makes its absorption underground so much the easier; moreover, the trouble of breaking it up into pieces before using it is spared. The drawbacks to the new method lie in its requiring a greater working capital, and the necessity for packing the residue for shipment, thereby greatly adding to the shipping expenses. The new method is at present employed by only one company in Dairen,¹ Suzuki & Co., which firm by the way operates the largest bean-mill in Manchuria.

We have no statistics covering the whole of Manchuria with reference to the industry. Those available are only those for Kwantung² Province and the South Manchuria Railway Zone for 1917, which are given below:

Location	No. of Mills	Capital 1,000 yen	Workmen	Production of Bean Cake		Production of Bean Oil	
				1,000 pieces	1,000 yen	1,000 piculs	1,000 yen
Dairen ¹	58	3,527	3,888	22,160	25,943	1,017	18,710
Kwantung ² Province							
(Dairen ¹ excluded)	24	195	175	646	782	30	556
Railway Zone ...	23	527	426	1,432	1,765	102	1,596
Total	105	4,250	4,489	24,238	28,490	1,149	20,862

A comparison of the above table with the one previously given referring to all industries shows that, in number

¹ Dairen (大連). ² Kwantung (關東).

of factories the bean oil industry accounts for more than 25 per cent. of the whole number of factories in Japanese Manchuria, while in amount of production it is responsible for over half the total value of the manufacturing output there.

The above table will further show the preponderance of Dairen¹ in the industry. A still later report has it that, at the end of 1918, there were in Dairen¹ 57 mills, in which 5,000 workmen were employed, and no less than 120,000 pieces of bean cake were manufactured daily, and that the total production of bean cake during 1918 was 26,000,000 pieces. It is hardly necessary to point out that this preponderance of Dairen¹ in the industry is due to the unsurpassed shipping facilities enjoyed by the port, for both bean oil and bean cake are made mostly for export.

Newchwang² was once the centre of the bean industry in South Manchuria and had about 35 mills in it in 1910. The ascendancy of Dairen¹ however, affected the port adversely in this as in many other matters, and at the end of 1916 there were only 12 going concerns. The industry thrives also in Antung,³ Kaiyuan,⁴ Pitzuwo,⁵ Wafangtien,⁶ and Harbin.

This last city, prior to 1917, held a place in the bean industry next only to Dairen,¹ and its progress was once even more phenomenal than that of Dairen,¹ owing to its naturally favourable position in the midst of the greatest bean-producing district in Manchuria, and the excellent shipping facilities provided by the Chinese Eastern Railway, which company, as we have said before, even resorted to a

1 Dairen (大連). 2 Newchwang (牛莊). 3 Antung (安東). 4 Kaiyuan (開原). 5 Pitzuwo (貔子窩). 6 Wafangtien (瓦房店).

tariff policy to attract the industry to the city. In its best days, immediately preceding the collapse of the Russian Empire, the city had in its precincts 21 mills, the annual production of which amounted to 9,558,000 pieces of bean cake, and 51,210,879 lbs. of oil. The anarchical condition prevailing in Siberia since 1917 has disabled the Chinese Eastern Railway to such an extent that it has become practically impossible for the mill-owners to send their wares to Vladivostok by the railway, while they were doubly afflicted by the difficulty of procuring coal from South Manchuria. This latter difficulty, it is said, has driven them to such a stress that at one time they were compelled to burn bean cake, so valuable of itself, to get the oil. As things now stand, scarcely half the number of the mills there are run, and this condition is expected to last for some time yet.

(b) Distilling: Side by side with the oil-manufacture, the distilling of *kaoliang* spirit¹ is reckoned one of the two great industries in Manchuria. It is however hardly worth the place thus assigned to it, it being an article of purely domestic consumption, adding little to the economic welfare of the people as a whole. But the amount of its annual production is very great, being 114,554,380 lbs. in weight, valued at 12,270,000 dollars (silver).

There are three kinds of spirit distilled in Manchuria; these are *kaoliang* spirit,¹ yellow spirit, and *shaoshing* spirit,² of which the first named is most widely in use. The distilling of *kaoliang* spirit¹ dates back, it appears, to the close of the 17th century, when the civilization of South China made

1 *kaoliang* spirit (燒酒). 2 *shaoshing* spirit (紹興酒).

its entrance into Manchuria. Then there was a plentiful supply of *kaoliang* from which to obtain the spirit, the crops being much more than sufficient to feed the people. With increase in the population, however, its manufacture became less profitable, and, moreover, a limit was placed by the authorities on the amount of *kaoliang* spirit¹ to be made annually with the purpose of preserving the food-stuff. Naturally, the industry was driven to the north, where *kaoliang* could be had more plentifully and cheaply, and no restriction was placed on distillation. Soon the distillers in the south found it difficult to compete with those in the north, so, by way of protecting their interest, a line of demarkation was drawn between south and north, beyond which either party was prohibited from extending its activity. Thus matters now stand, and under this arrangement the distillers in the south are said to be as well off as those in the north.

Kaoliang spirit¹ is a strong drink containing from 60 to 65 per cent. of alcohol, is colourless and transparent, and slightly acid, and when mixed with water takes on a whitish muddy colour. It has a special flavour which appeals greatly to the taste of the natives. The spirit is, however, mostly consumed by the lower classes, the higher ones generally drinking yellow spirit and *shaoshing* spirit.²

The distilling of *kaoliang* spirit is native to Manchuria. The grain is mashed and steamed, and, after standing for a while to cool to an appropriate degree, malt made from barley or small beans mixed with a small quantity of wheat, Indian corn, or black beans, is added. The vessel contain-

1 *kaoliang* spirit (燒酒). 2 *shaoshing* spirit (紹興酒).

ing it is then buried in the ground, with all its openings closed tight with mud, and there left for nine or ten days to ferment, after which the vessel is taken out and its contents distilled.

The Central Laboratory of the South Manchuria Railway Company has recently discovered that there is plenty of lactic acid in the residue left after distillation, which residue was usually thrown to the pigs as worthless, and this discovery has led to a good amount of lactic lime now being exported to Japan, where it enjoys a first-class reputation. The following table gives the number of distilleries and *han*,¹ the working unit in a distillery consisting of one distiller and several men.

Place	No. of Distilleries	No. of <i>han</i> ¹
Dairen ² and neighbourhood	6	6
Yingkow ³ and neighbourhood	7	26
Haicheng ⁴ and neighbourhood	3	9
Liaoyang ⁵ and neighbourhood	31	118
Mukden ⁶ and neighbourhood	21	60
Szupingchieh ⁷ and neighbourhood	29	94
Changchun ⁸ and neighbourhood	91	361
Kirin ⁹ and neighbourhood	10	44
Total	195	709

(c) Wheat Flour: There are two kinds of flour-mills in Manchuria called respectively *mofang*¹⁰ and *huomo*,¹¹ which literally mean grinding house and fire mill. The former is the native mill which, employing 2 to 10 coolies and 4 to 12 donkeys, conducts the work on a small scale,

1 *han* (班). 2 Dairen (大連). 3 Yingkow (營口). 4 Haicheng (海城). 5 Liaoyang (遼陽). 6 Mukden (奉天). 7 Szupingchieh (四平街). 8 Changchun (長春). 9 Kirin (吉林). 10 *mofang* (磨坊). 11 *huomo* (火磨).

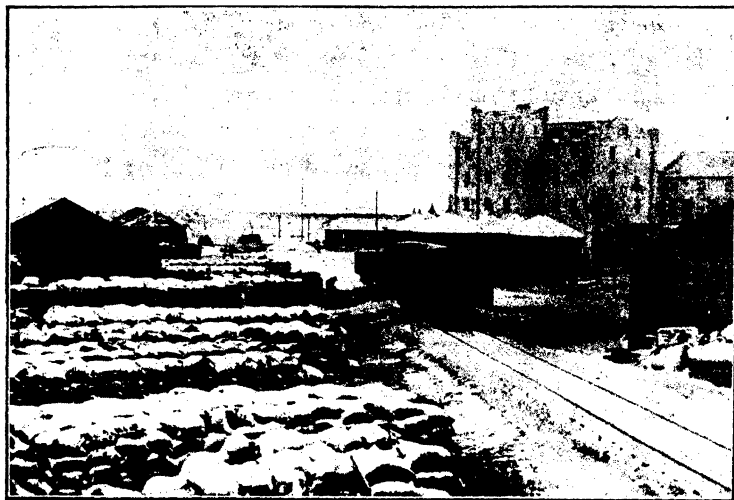
producing daily 500 to 2,000 piculs (66,650 to 266,600 lbs.) of flour. This kind of mill is found everywhere in Manchuria, and constitutes the local manufacture, only next in importance to distilling and oil-milling. However, mills of this kind are mostly conducted as a by-work by grain merchants, distilleries, and oil-mills, and moreover, their business constantly being encroached upon by those worked on the new style, their future is anything but encouraging.

The fire mill, on the other hand, is the mill provided with modern machinery to which steam or electricity is applied as the motive power, the daily production of which amounts at least to forty to fifty thousand bags. The largest wheat flour market in Manchuria is Harbin, followed by, in North Manchuria, Shwangchengpu,¹ Imienpo,² Ashihho,³ Hulan,⁴ Ninguta,⁵ Hairin,⁶ and Fulaerhki,⁷ and, in South Manchuria, Tiehling,⁸ Changchun,⁹ and Kirin.¹⁰

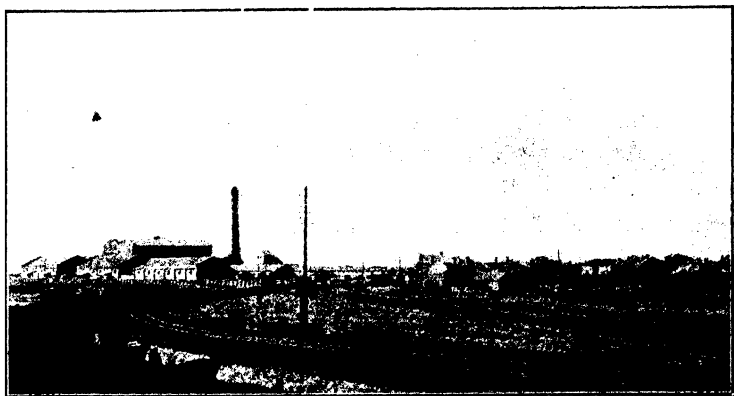
The new flour-mills in North Manchuria rose in consequence of the settlement of the Russians there, and were conducted by both Russians and Chinese, their chief customers being the Russian settlers in Manchuria and East Siberia. Those in South Manchuria were first started by Japanese soon after the Russo-Japanese War, and their products were mostly supplied to the Chinese.

At one time the northern mill-owners suffered much from the competition of the flour-mills in South Manchuria, the withdrawal of the Russian settlers from Manchuria in consequence of the Russo-Japanese War, and the abolition

1 Shwangchengpu (雙城堡). 2 Imienpo (一面坡). 3 Ashihho (阿什河). 4 Hulan (呼蘭). 5 Ninguta (寧古塔). 6 Hairin (海林). 7 Fulaerhki (富拉爾吉). 8 Tiehling (鐵嶺). 9 Changchun (長春). 10 Kirin (吉林).



Chinese flour mill, Changchun (長春)



South Manchuria Sugar Manufacturing Company, Mukden (奉天)

of the free trade zone which extended a distance of 50 Russian miles on either side of the Russo-Chinese frontier line, and many were obliged to close their doors, or at least reduce their production. The European War, however, did more than enable them to recover their former prosperity. The mills in and about Harbin were able at the time to produce an aggregate of four million bags of wheat-flour, but the local demand not being equal to the supply the surplus was exported abroad. Their business has since prospered. In South Manchuria, where the local supply of wheat-flour had always been short of demand, the prosperity enjoyed by the mills there was even greater. The following table gives the number of modern flour-mills in the different parts of Manchuria.

Place	Number of Mills	Place	Number of Mills
Tiehling ¹	1	Ashihho ⁵	1
Changchun ²	3	Hulan ⁷	1
Kirin ³	1	Szekiatzu ⁸	1
Harbin	9	Fulaerhki ⁹	1
Ninguta ⁴	2	Aigun ¹⁰	1
Imienpo ⁵	1	Total	22

(d) Iron: It has already been stated that Manchuria has two large iron works, Anshanchan¹¹ and Penhsihu.¹² The Anshanchan¹¹ Iron Mine is one of the nine mines of which the mining right was acquired by Japan by virtue of the Chino-Japanese Convention of 1915. There are eight mines located around the railroad town of Anshanchan¹¹ on

1 Tiehling (鐵嶺). 2 Changchun (長春). 3 Kirin (吉林). 4 Ninguta (寧古塔). 5 Imienpo (一面坡). 6 Ashihho (阿什河). 7 Hulan (呼蘭). 8 Szekiatzu (四家子). 9 Fulaerhki (富拉爾吉). 10 Aigun (愛輝). 11 Anshanchan (鞍山站). 12 Penhsihu (本溪湖).

the trunk line. The working of these mines is undertaken by a company called Chenhsing Wuhsien Kungszu,¹ a Chino-Japanese institution established in 1916 with a capital of Yen 140,000, largely supplied by the South Manchuria Railway Company. Of the eight mines above mentioned only three are worked. The ores are mostly hematite with a sprinkling of magnetite, and though rather poor in quality, containing at best 40 per cent. of metal, no less than 200 million tons of ore are estimated as being stored up in these three mines.

The Anshanchan² Iron Works are run by the South Manchuria Railway Company for the purpose of smelting the ores obtained from the above-mentioned mines. The present plan is to equip the works with a plant equal to turning out 150,000 tons of pig-iron annually, at an estimated cost of 40 million yen, and the work has been in progress since 1917. Two furnaces, each of the capacity of 200 tons of iron daily, with their accessory plants, were completed in September, 1919, and this means the completion of the first stage of the gigantic programme, the final aim of which is to produce one million tons of pig-iron annually. The main obstacles in the way of the realization of this great aim are the comparative poorness of the ores, and the difficulty of procuring the necessary supply of coal at reasonable price. But its success will mean a great thing not only for Manchuria but for Japan too, since her insufficient supply of iron has always constituted a standing menace to her industrial development.

¹ Chenhsing Wuhsien Kungszu (振興無限公司). ² Anshanchan (鞍山站).

The Penhsihu¹ Iron Works are run by a Chino-Japanese company called Penhsihu Meitieh Kungszu,² an institution with a capital of Hk. Tls. 7,000,000, supplied equally by Japanese and Chinese. The chief and original object of the company is the mining of coal, and the iron works were attached to it at a later period owing to the discovery of iron mines at Miaoerkou³ some 24 miles distant from the mining town of Penhsihu¹ on the Antung-Mukden⁴ Line. The mineral deposits there are extensive, those exposing themselves above ground alone being estimated to contain no less than 80 million tons of metal. But the drawback to the mines is, as with Anshanchan,⁵ the pooriness of the ores, which contain for the most part only 30 to 40 per cent. of metal. There are some mines yielding ore containing 60 to 70 per cent. of metal, but they are not many, and there is fear of their being quickly exhausted. These rich ores are now mostly worked. The iron works are provided with two furnaces, each with a capacity of 130 tons of iron daily, and two smaller ones. They are on the whole far smaller in scale than those at Anshanchan,⁵ and the production of pig-iron during 1918 was no more than 45,700 tons. They are planning, however, to erect a plant to deal with the poorer sort of ores, that is ore of under a 40 per cent. basis, and if they succeed in this their prospects may indeed be said to be great, because the supply of ore in that case will never be exhausted.

(c) Silk: As we have stated before, Manchuria produces a great quantity of wild-silk cocoons. These were

1 Penhsihu (本溪湖). 2 Penhsihu Meitieh Kungszu (本溪湖煤鐵公司).
3 Miaoerkou (廟兒溝). 4 Antung-Mukden (安東奉天). 5 Anshanchan (鞍山站).

formerly exported to Chefoo¹ to be reeled there. But the development in the silk-manufacture in Manchuria, notably in Antung,² has made that town even more famous than Chefoo¹ as a centre of the silk industry. According to recent statistics the town now has 2 Japanese and 25 Chinese factories, the total number of kettles (unit for computing the working capacity of a factory) aggregating 12,000 (the working capacity of a kettle is about 100 *kin* or 132.28 lbs. a year). After Antung,² Kaiping³ and Haicheng⁴ are noted for their silk, but in both these places the industry is carried on on a smaller scale, and in many instances as a side-work by the farmers. Kaiping³ had a famous silk market a hundred years ago, It still has, though now it is not half so important as that in Antung.² No figures can be obtained as to the annual production of wild-silk in Manchuria, but, during 1917, its export amounted to 2,314,800 lbs., valued at Yen 9,100,000. Besides 4 million yen worth of cocoons were exported, and this shows that the industry is capable of development in the future.

(f) Timber: The silvan wealth of Manchuria has been described, and it is but natural that the preparation of timber should form an important item in Manchurian industry. Affiliated to the Tsaimu Kungszu⁵ at Antung,² capital \$3,000,000 (Chinese), the chief business of which is the felling and rafting of trees growing on the banks of the Yalu,⁶ is a saw mill, incorporated with a capital of Yen 500,000. There are besides 15 Japanese saw milling companies at Antung,² with an aggregate capital of Yen 600,000,

1 Chefoo (烟台). 2 Antung (安東). 3 Kaiping (蓋平). 4 Haicheng (海城). 5 Tsaimu Kungszu (採木公司). 6 Yalu (鴨綠江).

in which some 1,500 people are employed. There are also saw mills in Harbin and Kirin,¹ and along with the exploitation of North Manchurian forests, these two places seem to be destined to be the two great timber markets of Manchuria north of Antung.²

(g) Sugar: Of the new industries that have sprung into existence of late in Manchuria, the manufacture of beet-sugar is one of the most hopeful. Strictly speaking, the making of beet-sugar is no new undertaking in Manchuria. As far back as 1906 General Chao Erh Sun,³ then Governor of Mukden⁴ Province, established an experimental farm outside Mukden,⁴ to the presidency of which was appointed a certain Mr. Chen,⁵ graduate of an American college, to make experiments upon various kinds of new crops, when the sugar-beet gave especially satisfactory results. Encouraged, the general conceived the idea of establishing a large Chino-Japanese concern for the manufacture of beet-sugar, to which project Mr. Koike, then the Japanese Consul-General in Mukden,⁴ gave hearty support. The project was all but consummated when it was frustrated by the opposition of an anti-Japanese party, which induced the Peking⁶ Government to withhold sanction to its establishment. But, by this time, the profitableness of the undertaking had been perceived by certain Russians, and they established the first sugar factory in Ashihho,⁷ near Harbin, in November, 1909. The following year a joint-stock company was organized by some Chinese in Hulan,⁸ largely

1 Kirin (吉林).¹ 2 Antung (安東). 3 Chao Erh Sun (趙爾巽).
4 Mukden (奉天). 5 Chen (陳). 6 Peking (北京). 7 Ashihho (阿什河). 8 Hulan (呼蘭).

through Government aid, to carry on the manufacture of sugar. But the industry did not receive much attention from the public until, in December, 1916, a large sugar factory organized by Japanese capitalists, including Baron Shibusawa, Mr. Magoshi, etc., with a capital of Yen 10,000,000, made its appearance near Mukden.¹

The Russian factory in Ashihho² above referred to was established by Poles with a capital of one million roubles, and had installed in it two sugar-refining machines, and its output was from 120,000 to 150,000 pood (4,328,400 to 5,410,500 lbs.) of refined sugar annually. The beet seeds were imported from Germany, and part of the crop was cultivated by the factory itself and part by local farmers from whom they purchased the crops grown by them. For some years their business has made but little progress owing to the low price of sugar, but at present they seem to be doing well. The Chinese factory in Hulan,³ the capital of which is said to be something like 3 million silver yen, was badly managed. The entire capital was squandered, and the institution was once on the verge of liquidation. Reforms were then introduced into its management, and through the aid given by the authorities, coupled with the favourable circumstances which have since prevailed for the industry, the affairs of the company are now said to be very much improved. The Japanese factory, by far the largest of all, with a capital of Yen 10,000,000, has little history, having been opened to business in 1917 only, but has every prospect of success. Beet is cultivated over an area of 2,500 cho (6,127 acres), from which it is expected

1 Mukden (奉天). 2 Ashihho (阿什河). 3 Hulan (呼蘭).

to obtain crops amounting to 100 million *kin* (132,280,000 lbs.) or 40,000 *kin* (52,912 lbs.) per *cho* (2.45 acres), and this will enable the company to manufacture crude sugar to the amount of something like 10 million *kin* (13,228,000 lbs.) annually.

(h) Cement: The ever-increasing demand for cement in Manchuria, North China, and Eastern Siberia on the one hand, and the abundant presence of the material necessary for its manufacture, lime-stone and clay, on the other, induced the Onoda Cement Company of Japan to establish a branch factory in the small town of Choushuitzu,¹ a suburb of Dairen,² as early as 1907. Work was not, however, actually started till 1909, and it has since been able to establish a very successful business. The factory is ideally situated, the lime-stone being obtained from the hills right behind it and the clay in the field just in front, and a line of railway has been built to connect the factory with the railroad station of Choushuitzu.¹ Its annual output since its establishment is given in the following table.

Year	Cement	Bricks for Pavement	Bricks for Rooms
	<i>Casks</i>		
1909	56,710	8,926	11,019
1910	149,783	20,616	15,812
1911	138,849	36,837	12,134
1912	180,866	6,720	10,343
1913	194,179	16,500	24,432
1914	203,578	17,944	44,740
1915	219,714	9,513	38,740

(i) Salt: The manufacture of salt is conducted

¹ Choushuitzu (奥永子). ² Dairen (大連).

extensively all along the sea-coast of Mukden¹ Province, which, by the way, is the only province of Manchuria having access to the sea. Especially are the districts around Newchang,² Kaiping,³ Fuhsien,⁴ and the Japanese leased territory of Kwantung⁵ noted for the industry. The method in vogue is that of spontaneous evaporation, for which the sea-coast here offers special advantages, since the water contains a large percentage of salt, the dry wind from the Mongolian desert makes evaporation speedy, and the soil conditions are suitable for the construction of salt pans.

Salt manufacture is a very old industry in these parts, and is dated by one author as far back as 3,000 years before Christ! The old method was that of boiling. The manufacture of salt by sun evaporation was first introduced into China by a Roman Catholic priest at the beginning of the 18th century. It was highly approved by the then Emperor of China, who, by way of encouragement, caused some model salt fields to be constructed along the coast of Chili⁶ Province, and also issued a proclamation exhorting its adoption by other provinces. The salt manufacture in Manchuria according to this method was apparently started by the immigrants from Shantung⁷ Province.

The construction of a salt field somewhat differs according to locality but each field has at least one reservoir for salt water, one evaporating basin, one crystalizing basin, and a number of dykes and ditches. One set of equipment equal to the complete manufacturing process in itself is called a *fu*,⁸ and a group of such *fu*⁸ in one place is called collectively

1 Mukden (奉天). 2 Newchwang (牛莊). 3 Kaiping (蓋平). 4 Fuhsien (復縣). 5 Kwantung (關東). 6 Chili (直隸). 7 Shantung (山東). 8 *fu* (副).

a *tso*.¹ According to the available Chinese statistics, Manchuria, outside Kwantung² Province, has altogether 2,510 *tso*,¹ three of which are conducted by the Government, consisting of 4,323 *fu*,³ and the annual yield of salt is estimated in normal years to be from 730,000 to 1,090,000 *koku* (4,345,238 to 6,488,095 piculs).

The origin of the salt manufacture in Kwantung² Province does not appear to be as remote as in other places, and was probably no earlier than about the beginning of the 18th century. At one time it was very extensively conducted, but wars and maladministration caused the industry to wane, and at the time of the Russo-Japanese War, most of the salt fields, save some at Pitzuwo⁴ and Pulantien,⁵ were laid waste, and in some places the dilapidation was so great that it was difficult to trace their sites. Under the Japanese régime, not only have many new salt pans been created along the coast, but these old ones have been repaired, and the salt manufacture is once more one of the most prosperous industries of the Peninsula. There is still 18,380 acres of low-lying land capable of being converted into excellent salt fields, showing that there is yet room for development in this useful industry. The annual extension of the salt fields is shown in the following table.

Year	Japanese		Chinese		Total	
	No. of Fields	Area	No. of Fields	Area	No. of Fields	Area
		Acres		Acres		Acres
1911	179	4,195	172	3,650	351	7,845
1912	188	4,406	166	3,484	354	7,890
1913	207	4,828	166	3,484	373	8,312

1 *tso* (座). 2 Kwantung (關東). 3 *fu* (副). 4 Pitzuwo (貔子窩).
5 Pulantien (普蘭店).

Year	Japanese		Chinese		Total	
	No. of Field	Area	No. of Field	Area	No. of Field	Area
		Acres		Acres		Acres
1914	260	6,502	170	3,589	430	10,091
1915	260	6,504	172	3,656	432	10,160
1916	260	6,504	172	3,656	432	10,160
1917	260	6,506	172	3,656	432	10,162

The annual yield of salt varies greatly according to weather conditions but on the whole is constantly increasing as shown in the following table.

Year	By Japanese		By Chinese		Total
	Piculs		Piculs		Piculs
1911	580,155		604,970		1,185,125
1912	309,286		387,964		697,250
1913	995,667		856,916		1,852,583
1914	1,169,977		675,517		1,845,494
1915	823,649		401,023		1,224,672
1916	1,501,405		996,940		2,498,245
1917	1,613,554		1,032,785		2,646,339

The greatest drawback of the Manchurian salt is its colour, owing to the mud that gets into it more or less during the evaporating process. But analysis shows that it may fairly be ranked with the next to the best of the Japanese salt. The Japanese Salt Manufacturing Company had the bottom of one of their crystalizing basins paved with brick by way of trial, and got excellent results, the salt thus made being of a pure white colour. This and other improvements will enable Manchurian salt to take no mean a place in Japanese and other Eastern markets.

Chemical Industry :—When Messrs. Suzuki & Co. of Kobe purchased from the South Manchuria Railway Com-

pany the oil-mill by extraction system, referred to before, it also took over the glycerine and fatty acid factories attached to the oil-mill. A certain Mr. Kato also established a factory of similar nature, and the year 1915 saw a large oil and fat factory established in Dairen¹ with a capital of Yen 1,000,000. The primary object of the factory is the manufacture of olein and stearin through the process invented by Mr. Okada, the chief engineer, which consists in solidifying bean oil by means of hydrogenation, and then analysing the compound. The enterprise is drawing much attention on account of its novelty, and promises well.

Many new enterprises are on foot, some of which are given below.

Name	Capital 1,000 Yen	Object	Location	Remarks
Manchuria Chemical Industrial Company.	10,000	Manufacture of nitric lime by separating nitrogen from air by electricity	Fushun ²	Factories now being built
Tai Hua Kung Szu ³ ...	300	Manufacture of sugar-candy and egg flour	Dairen ¹	Do
Dairen ¹ Spinning Co.	2,000	Spinning	Do	Being organized
Kanazawa Spinning Co.	1,500	Do	Changchun ⁴	Do
Manchuria Hemp Manufacturing Co.	1,000	Manufacture of hemp bags and canvas	Dairen ¹	Do

Electricity :—Electricity is quite extensively used in Manchuria as motive power as well as for lighting purposes.

¹ Dairen (大連). ² Fushun (撫順). ³ Tai Hua Kung Szu (大華公司). ⁴ Changchun (長春).

Below is given the list of electric companies of the year 1917 in Manchuria.

Location of Electric Works	For Light & Industries 1,000 Kilowatts	For Trams 1,000 Kilowatts	Total 1,000 Kilowatts	Receipts			Total	Consumption of Coal 1,000 Yen
				From Lights 1,000 Yen	From Motors 1,000 Yen	From Others 1,000 Yen		
Port Arthur ¹	1,145	—	1,145	98	14	5	118	3
Dairen ² ...	10,375	3,382	13,758	498	114	90	703	20
Liaoyang ³ ...	278	—	278	40	—	—	40	1
Mukden ⁴ ...	1,412	—	1,412	111	11	13	136	4
Fushun ⁵ ...	46,195	2,518	48,713	91	238	16	346	134
Yentai ⁶ ...	53	—	53	—	—	—	—	—
Changchun ⁷ .	3,370	—	3,370	123	58	16	198	9
Antung ⁸ ...	1,720	—	1,720	115	29	15	160	3
Total ...	64,553	5,900	70,453	1,079	467	158	1,705	176

COMPARATIVE TABLE FOR ELECTRICITY FOR
THE PAST SIX YEARS.

Year	For light & Industries	For Trams	Total	Receipts				Consumption of Coal
				From Lights	From Motors	From Others	Total	
	1,000 Kilowatts	1,000 Kilowatts	1,000 Kilowatts	1,000 Yen	1,000 Yen	1,000 Yen	1,000 Yen	1,000 Yen
1912...	15,039	2,776	17,816	583	292	65	741	34
1913...	18,935	3,006	21,942	653	150	88	893	43
1914...	23,534	3,861	27,395	717	181	114	1,012	49
1915...	29,662	5,164	34,826	781	190	140	1,112	113
1916...	42,682	5,825	48,507	907	220	119	1,247	120
1917...	64,553	5,900	70,453	1,079	467	158	1,705	176

Latest Development in Industry.—With regard to the development of the industrial enterprises in Manchuria, the

1 Port Arthur (旅順). 2 Dairen (大連). 3 Liaoyang (遼陽).
4 Mukden (奉天). 5 Fushun (撫順). 6 Yentai (煙臺). 7 Changcaun (長春). 8 Antung (安東).

Semi-Annual Report of the Bank of Chosen ending December 31, 1919, says :

“ The industrial boom continuing from last year remained unrelaxed during the period under review. The old enterprises generally made good progress, while many new ones came into being, and no small number of private firms were re-organized into joint-stock companies. The total number of new companies established during the year 1919 reached 246, with an aggregate capital of Yen 138,000,000, Yen 40,000,000 paid up. Dairen¹ had the largest number of the new companies thus established, there being 151 of them in that city alone, and Mukden² followed with 25, the total capitalization for both cities aggregating Yen 108,000,000, or 79 per cent. of the whole. A classification of these companies according to their nature shows that 65 with a total capital of Yen 30,800,000 are manufacturing ; 60 with capital of Yen 19,300,000 commercial ; and 39 with a capital of Yen 32,400,000 banking and trust.”

1 Dairen (大連) 2 Mukden (奉天).

CHAPTER VIII

DEVELOPMENT OF TRADE AND COMMERCE

Trade development; Balance of trade; Changes in Manchurian trade channels—(a) South Manchuria, (b) North Manchuria; Exports; Imports; Foreign trade of Manchuria according to countries; Recent growth of Dairen¹; Some special features in Manchurian Customs regulations.

Trade Development :—The trade conditions of Manchuria prior to the opening of Newchwang,² and during the period in which Newchwang² was the sole open port of Manchuria have been treated of in Chapter I, when we considered the economic evolution of Manchuria vis-à-vis foreign influence. The Russo-Japanese War, which marked a new epoch for Manchuria, politically and economically, introduced a radical change in the Manchurian tradal situation. Newchwang² ceased to be the sole port, for many other places were opened to trade in both South and North Manchuria. The following are the ports thus opened.

Port	Date of Opening	Situation
Antung ³ ...	...Mar. 1, 1907	{ In the south-eastern part of the country, near the mouth of the Yalu. ⁴
Tatungkow ⁵ ...	...Oct. 1, 1907	

1 Dairen (大連). 2 Newchwang (牛莊). 3 Antung (安東). 4 Yalu (鴨綠江). 5 Tatungkow (大東溝).

Port	Date of Opening	Situation
Dairen ¹ ...	...July 1, 1907	{Near the southern extremity of the Liaotung ² Peninsula.
Manchouli ³ ...	...Feb. 5, 1908	{On the western frontier of Amur Province, bordering on Siberia.
Suifenh ⁵ ...	...Feb. 10, 1908	{On the eastern frontier of Kirin ⁶ Province, bordering on the Siberian Littoral Region.
Harbin ...	...July 1, 1909	{In the north of Kirin ⁶ Province, on the right bank of the Sungari. ⁷
Sansing ⁸ ...	...July 1, 1909	{In the north-east of Kirin ⁶ Province, at the confluence of the Hurka ⁹ and the Sungari. ⁷
Aigun ¹⁰ ...	...Aug. 1, 1909	{In the north of Amur ⁴ Province, on the right bank of the Amur. ⁴
Hunchun ¹¹ ...	...Jan. 1, 1910	{In the south of Kirin ⁶ Province, on the left bank of the Hunchun. ¹¹
Lungchingtsun ¹²...	...Jan. 1, 1910	{In the south of Kirin ⁶ Province to the west of Hunchun. ¹¹

It can not be denied that, even before the official opening of these ports, much foreign trade was carried on through some of them, notably through Manchouli³ and Suifenh⁵, frontier towns bordering respectively on the Za-Baikal and Maritime provinces of Siberia through which passes the Chinese Eastern Railway. But the trade there was outside the control of the Chinese Customs, and in consequence no reliable figures are obtainable. In 1908 the Chinese Customs was installed in both these frontier

1 Dairen (大連). 2 Liaotung (遼東). 3 Manchouli (滿洲里). 4 Amur (黑龍江). 5 Suifenh (綏芬河). 6 Kirin (吉林). 7 Sungari (松花江). 8 Sansing (三姓). 9 Hurka (牡丹江). 10 Aigun (愛琿). 11 Hunchun (琿春). 12 Lungchingtsun (龍井村).

towns, and for the first time light was thrown on the whole tradal situation of Manchuria.

In 1908 the Manchurian trade, as returned by all the Customs in the country, aggregated Hk. Tls. 95,812,627, or $11\frac{1}{2}$ per cent. of the whole trade amount of all China. It was also in that year that a trial shipment of beans was made to Europe and was attended with great success. In consequence, the next year, 1909, witnessed a marked increase in its export trade, which amounted to Hk. Tls. 149,620,000, or 15.9 per cent. of the trade of all China. The demand for beans and bean oil abroad continued to grow, as a result of which the figures rose in 1911 to Tls. 195,240,000, or 19.3 per cent. of all Chinese trade. Through the outbreak of the European War in 1914, and the subsequent Japanese participation in it, the progress of trade was temporarily checked, and the Customs returns for the year showed a shrinkage of no less than Tls. 7,840,000. But soon the beneficial effect of the War on the trade situation of the whole Far East began to show itself also in Manchuria. The demand for Manchurian products abroad increased, and new markets hitherto unknown were opened to them, thus bringing up the figures for 1915 to Tls. 199,966,859, which increased to Tls. 217,583,268 in 1916, to Tls. 250,989,595 in 1917, and to Tls. 267,203,601 in 1918.

The following table will show the trade development made by Manchuria since 1908, and also that by China during the same period, the latter being affixed to show the relative position of Manchurian trade to that of all China.

Year	(a) Manchuria's Net Trade			(b) China's Net Trade				Per- centage of (a) to (b)
				Net Foreign Trade		Inland Trade	Total	
	Import	Export	Total	Import	Export			
	1,000 Hk. Tls.	1,000 Hk. Tls.	1,000 Hk. Tls.	1,000 Hk. Tls.	1,000 Hk. Tls.	1,000 Hk. Tls.	1,000 Hk. Tls.	
1908	50,669	45,143	95,812	396,261	260,190	178,544	834,997	11.5
1909	63,269	86,357	149,626	417,586	320,893	201,243	939,722	15.9
1910	72,871	86,846	159,718	462,437	361,160	184,349	1,007,947	15.8
1911	95,384	99,855	195,240	473,517	369,404	186,754	1,013,677	19.3
1912	94,640	89,309	183,950	473,097	370,520	182,699	1,026,316	17.9
1913	99,149	99,765	198,914	570,162	403,305	176,045	1,149,513	17.3
1914	97,824	93,242	191,067	557,109	345,280	156,431	1,058,821	18.0
1915	90,359	109,606	199,966	449,389	418,861	217,180	1,085,630	18.4
1916	105,379	112,203	217,583	515,045	481,797	462,688	1,459,531	14.9
1917	130,093	120,895	250,989	552,439	462,931	494,280	1,509,650	16.6
1918	142,097	125,105	267,203	553,516	485,883	554,598	1,593,997	16.8

From the above table it will be seen that during the past eleven years the trade of Manchuria has nearly trebled, while the ratio relative to the whole trade of China has increased from 11.5 to 16.8 per cent., showing that the trade progress of Manchuria has been much faster than that of China as a whole.

Besides the open ports above mentioned there are some places called *shangfoudi*,¹ which receive special treatment with regard to trade. These places are open to the residence of foreigners and their trade, and include, besides the five ports above mentioned, viz., Manchouli,² Harbin, Sansing,³ Aigun,⁴ and Hunchun,⁵ the following 12 places:

Fenghuangcheng,⁶ Liaoyang,⁷ Hsinmintun,⁸ Tiehling,⁹

¹ *Shangfoudi* (商埠地). ² Manchouli (滿洲里). ³ Sansing (三姓).

⁴ Aigun (愛珥). ⁵ Hunchun (琿春). ⁶ Fenghuangcheng (鳳凰城).

⁷ Liaoyang (遼陽). ⁸ Hsinmintun (新民屯). ⁹ Tiehling (鐵嶺).

Tungchiangtzu,¹ Fakumen,² Mukden,³ Changchun,⁴ Kirin,⁵ Ninguta,⁶ Chichihar,⁷ and Hailar.⁸

The special treatment accorded to these places will be noted later on in connection with the Customs regulations in Manchuria.

Balance of Trade.—A further encouraging aspect of the Manchurian trade is found in the fact that the trade there has almost always maintained an equilibrium. During the eleven years given in the above list, not a single year saw China as a whole maintain anything like equilibrium, export being always exceeded by import. The same difficulty was experienced by Japan and Chosen. But this has seldom been the case with Manchuria. Certain years, indeed, saw import exceed export, but the deficit was made good, or even more than made good, by the export exceeding import in the course of the next year, or at the latest the year after. When, therefore, the eleven years are taken together, the balance shows Hk. Tls. 26,594,125 in favour of Manchuria. This especially healthy condition of the trade of Manchuria is shown in the following table :

Year	Import	Export	Import-excess	Export-excess	Total Export-excess
1908 ...	50,669,264	45,143,363	5,525,901		
1909 ...	63,269,015	86,357,860		23,088,845	
1910 ...	72,871,718	86,846,897		13,975,179	
1911 ...	95,384,311	99,855,712		4,471,401	
1912 ...	94,640,621	89,309,545	5,331,076		
1913 ...	99,149,138	99,765,241		616,103	

1 Tungchiangtzu (通江子). 2 Fakumen (法庫門). 3 Mukden (奉天). 4 Changchun (長春). 5 Kirin (吉林). 6 Ninguta (寧古塔). 7 Chichihar (齊齊哈爾). 8 Hailar (海拉爾).

Year	Import	Export	Import-excess	Export-excess	Total Export-excess
1914 ...	97,824,808	93,242,581	4,582 227		
1915 ...	90,359,869	109,606,999		19,247,139	
1916 ...	105,379,367	112 203,501		6,824,534	
1917 ...	130,093,715	129,895,880	9,197,835		
1918 ...	142,097,819	125,105,782	16,992,037		
Total.	1,041,739,636	1,068,333,761	41,629,076	68,223,201	26,594,125

It may be said that the natural resources of Manchuria, combined with Japanese enterprises and Chinese industry, have produced this satisfactory state of affairs. To us, the Bank of Chosen, the question of trade balance in Manchuria is of special interest, for it was primarily on this account that the Bank made its way into this great country. A fuller description in this connection will be given later on.

Changes in Manchurian Trade Channels :—(a) South Manchuria: We have already seen that, prior to the opening of Newchwang,¹ the trade routes of South Manchuria took three directions, viz., the Liao,² Chinchou³ or Liaotung⁴ Peninsula, and the Yalu.⁵ The opening of Newchwang¹ gave the Liao² Route a great preponderance over the others, and it is recorded that in its prosperous days it carried on its bosom no fewer than 10,000 junks. The defects of the route have also been pointed out. In the first place it is too shallow to admit of its navigation by large vessels, and, what is worse, is ice-bound during four months in the year. This latter drawback is further aggravated by the fact that these four months practically cover the only season in which

1 Newchwang (牛莊). 2 Liao (遼河). 3 Chinchou (金州). 4 Liaotung (遼東). 5 Yalu (鴨綠江).

overland traffic is possible, for it is only in this season that the quagmires into which Manchurian roads are converted in other seasons are made hard enough by frost for the passage of the clumsy Chinese cart. The consequence is that when traffic by water is open the overland traffic is closed, and vice-versa, making it necessary for the goods to be stored a good many months at the depots on the river, unless fortunate enough to hit upon the very short period during which the river is open and the ground frozen hard enough for overland transportation. With all these drawbacks the Liao¹ was the greatest commercial route till the introduction of the railways dealt it an irreparable blow. But this blow did not come during the time the Manchurian railways were in Russian hands, for the new route created by them was in those days practically monopolized by the military. The old route retained, or more than retained, its supremacy, for the few years following their completion were the most prosperous days for the route and for Newchwang² its port.

With the transfer of the South Manchuria Railways to Japan, whose object in Manchuria has always been pacific and purely commercial, began the change in the trade channels in Manchuria. The old Chinchow³ Route was revived, and the merchandise hitherto carried to the depots on the Liao¹ by cart, thence to Newchwang² by junks, spending sometimes weeks on end on the way, was now carried to the railway stations, thence to be hurried by train to Dairen,⁴ which can be reached from the farthest

1 Liao (遼河). 2 Newchwang (牛莊). 3 Chinchow (金州).
4 Dairen (大連).

end of South Manchuria in 24 hours. Meanwhile Dairen¹ was equipped with shipping and landing facilities, surpassing in every respect those of the old port of Newchwang,² and, above all, the new port had the advantage of being open all the year round. Thus the trade channel, hitherto monopolized by the Liao,³ was diverted to a new one, the South Manchuria Railway. It should be understood, however, that this did not mean the death-knell for the old Liao³ Route. It has an advantage which can never be supplanted by others, and to this day it remains one of the greatest commercial routes in Manchuria, and Newchwang² one of its most important sea-ports. The introduction of railways caused an enormous development throughout Manchuria, and the Liao³ is reaping the benefit as well as other routes. The worst enemy of the Liao³ is itself, in that in some parts of its course the river bed is constantly becoming shallower on account of the ever-accumulating silt. A scheme is said to be on foot to dredge the river. The work would undoubtedly be a gigantic one and entail considerable difficulties, but it is one sure of a rich reward.

The trade route of South Manchuria was further diverted by the opening of Antung⁴ in 1907. The Yalu⁵ Route has never been very important owing to the undeveloped state of the districts through which the river flows, and to numerous other defects possessed by it as a trade route. For one thing, though at high tide a boat of 2,000 tons can reach Antung,⁴ above the town only very small junks can be navigated. It has been, however, a

1 Dairen (大連). 2 Newchwang (牛莊). 3 Liao (遼河). 4 Antung (安東). 5 Yalu (鴨綠江).

distinct trade route since old times, and the opening of Antung¹ has provided it with an open port of its own. Thus Antung¹ is to the Yalu² what Newchwang³ is to the Liao.⁴ But, while the prosperity of Newchwang³ is largely dependent on the Liao,⁴ that of Antung¹ owes more to the Antung-Mukden⁵ Line than to the Yalu.² The rise of Antung¹ to the second place in Manchuria as a trading port is largely due to the presence of this railway, and by far the largest part of the trade volume as returned by the Customs consists of goods in transit, adding materially but little to the prosperity of the port. Near Antung¹ there is another open port serving this same route, called Tatungkow.⁶

Thus it may be said that the trade channels of Manchuria have, after many vicissitudes, returned to their original routes, which are certainly natural ones, though the central route represented by the South Manchuria Railway with Dairen⁷ as its port has risen to such an eminence that the others are likely to be overlooked by the casual observer.

A fourth route may be added. It is the overland route served by Hunchun⁸ and Lungchingtsun.⁹ At present it is the least important of the Manchurian trade routes, but will become a very important one when the projected Kirin-Hoilyong¹⁰ Railway is completed, for it will provide Manchuria with an opening on the Sea of Japan, which will greatly facilitate the direct trade between it and Central and Northern Japan.

1 Antung (安東). 2 Yalu (鴨綠江). 3 Newchwang (牛莊). 4 Liao (遼河). 5 Antung-Mukden (安東奉天). 6 Tatungkow (大東溝). 7 Dairen (大連). 8 Hunchun (琿春). 9 Lungchingtsun (龍井村). 10 Kirin-Hoilyong (吉林會寧).

(b) North Manchuria: The trade course in North Manchuria was necessarily governed by its waterways before the introduction of railways. No small amount of the beans exported from the Port of Newchwang¹ in its early days was brought to it from North Manchuria by the Liao,² which thus served part of North Manchuria as well as South Manchuria. The Amur³ and the Sungari,⁴ with their numerous tributaries, aided by old overland tracks, served the rest of the country. These rivers, generally deeper than those in South Manchuria, and navigable for quite a distance by steamboats, had the same drawback as those in the south of being practically blocked by ice for about five months. With railways built across the country, trade channels changed their direction and began in general to follow the railways. The loss of South Manchuria and, with it, of Port Arthur,⁵ caused the Russians to turn all their attention to Harbin and the Port of Vladivostok, which latter became the sole sea-port of importance in their Far-Eastern possessions. Harbin became the centre of the North Manchurian trade. Goods from all the country round were conveyed thither by water, by cart, or by rail, to be consumed there, or to be distributed to surrounding districts, or exported abroad through the Port of Vladivostok. At one time, through the tariff policy adopted by the Chinese Eastern Railway, no small proportion of South Manchurian products was conveyed north to Harbin to be forwarded thence to Vladivostok. This was of course against the natural course and did not last long. As things

1 Newchwang (牛莊). 2 Liao (遼河). 3 Amur (黑龍江). 4 Sungari (松花江). 5 Port Arthur (旅順).

are now, much of the products of North Manchuria, which in normal times would have taken the north-eastern route to Vladivostok, are being conveyed south to Dairen,¹ because of the disorder now prevailing in Siberia, disabling both the Chinese Eastern Railway and the Port of Vladivostok. North Manchuria has altogether five open ports, not one of which is a sea-port. Manchouli² and Suifenh³ are frontier towns at the two extremities of the Chinese Eastern Railway. The importance of these towns, especially of Suifenh,³ is not derived from the towns themselves as such but from the fact that the Customs there serves the greatest trade channel in North Manchuria. The following table will give an idea as to the respective importance of the trade channels in North and South Manchuria given above.

A word of explanation is necessary for the clear understanding of the Chinese trade returns, for these are highly complicated as compared with those of other countries. In the first place, foreign goods are divided into (a) those imported from foreign countries, (b) those imported from Chinese ports, (c) those re-exported to foreign countries, and (d) those re-exported to Chinese ports. The sum of (a) and (b) makes the total of foreign imports, and that of (c) and (d) the total of foreign re-exports, and the total of foreign imports minus the total of foreign re-exports makes the net total of foreign imports. Again, Chinese produce is divided into (a) imports, (b) re-exports to foreign countries, and (c) re-exports to Chinese ports, and (a) minus the sum of (b) and (c) makes the net total of Chinese imports.

1 Dairen (大連). 2 Manchouli (滿洲里). 3 Suifenh (綏芬河).

The total imports, as given in the preceding table, is the grand total of the net total of foreign imports and net total of Chinese imports. So much for imports. As for exports, they are divided into Chinese produce exported to foreign countries, and Chinese produce exported to Chinese ports, and the sum of these two items makes the total export as given in the preceding table. Thus it will be seen that, in the Chinese trade returns, the ports are made the basis of computation, whereas in other countries the country as a whole is so made.

China is in itself a world, and this rendering of trade returns perhaps better answers practical purposes. Especially is this the case with this work which treats of Manchuria by itself and not as a part of China. For instance, it matters little whether the beans are exported to Japan or to one of the Chinese ports from the Manchurian standpoint, though to China as a whole it makes a great difference.

A study of the following detailed returns for 1917 will enlighten our readers further upon this subject, and enable them to understand more accurately the relation in which Manchuria stands to the world at large and to the other parts of China from a trade point of view.

Exports.:—Like Chosen, the exports of Manchuria consist mostly of agricultural products, notably of beans and their products, bean cake and bean oil. The total export trade of Manchuria in 1917 amounted in value to Hk. Tls. 153,313,993, of which Tls. 70,405,803 or nearly one-half the amount represented the value of beans, bean cake, and bean oil. Beans and their products are followed by Tls. 6,626,396 of beverages and various food-stuffs, Tls.

5,655,618 of *kaoliang*, Tls. 4,293,736 of other cereals, Tls. 4,596,799 of wild raw silk, Tls. 4,594,234 of coal and coke, Tls. 3,375,077 of skins and leather, Tls. 3,034,685 of metal and metal manufactures, Tls. 2,070,167 of cocoons, Tls. 1,999,390 of millet, Tls. 1,935,910 of pulse other than soya beans, etc.

Beans, Bean Cake, and Bean Oil: Much has been related of these most important articles of trade in Manchuria, and our observations here will be confined only to their tradal side.

As with most other of the trade articles, these were first cultivated and prepared for domestic consumption. It was the discovery of the fertilizing quality of bean cake about the middle of the 19th century that first made them articles of trade. But their market was confined to China. In consequence of the Chino-Japanese War (1894-1895) their market was extended to Japan, and through the Russo-Japanese War to Europe and America. The circumstances are well described in the "Soya Bean of Manchuria" published by the Statistical Department of the Inspectorate-General of Chinese Customs, which contains the following.

"During the Russo-Japanese War the vast armies which occupied the whole of South and Central Manchuria depended for their cereal food largely upon the local supplies, and a great impulse was given to Manchurian agriculture at that time. But after the withdrawal of the troops the cessation of local demand called, in the natural course of events, for the discovery of a fresh market, and especially so for the money crops of wheat and beans.

The market for these crops seemed at first to be the neighbouring one of Japan, and the trade via Vladivostock received the earliest benefit from the new development ; but when the *post-bellum* wave of depression swept over Japan the demand ceased there, and it became necessary to find a new field for the consumption of the surplus supplies. Before the creation of this new situation farmers had been content to plant small areas with but slight annual increase, merely adjusting the supply to the restricted demand ; but the time was now ripe for a great development of the trade.

“ It was in November 1908 that Messrs. Mitsui & Co. made the first considerable trial shipment to England. The result was so satisfactory that an order for a large consignment followed, and in March 1909 the first large cargo—5,200 tons—was landed in Hull. Contracts were at once made, as the suitability of the new oil seeds for many purposes became known and the good condition in which they arrived. During the season 400,000 tons were exported, almost all to England, and ‘ many of the large oil crushing mills set their entire plant to work on the crushing of the beans, to the exclusion of cotton seed, linseed, and other oleaginous seeds ; the supposed shortage of the flax and cotton crops in the United States and the anticipated shortage of linseed in the Argentine, with the resultant scarcity of cotton and linseed products, found the English market comparatively unperturbed, for the reason that soya oil and cake can supply most of the requirements as well ’—(Extract from article in “ The Economist ”). Messrs. Lever Brothers, of Port Sunlight,

were the first soap manufacturers to use bean oil on an extensive scale, and were followed shortly by others, so that the demand increased to such an extent that for the new season (1909-1910) 50 steamers were chartered to load beans at Dairen¹ and Vladivostok, 300,000 tons, worth £2,000,000, being contracted for in December alone."

Thus bean oil found a market in Europe and America, while beans and bean cake found one in Japan. The last great impetus to the bean trade was given by the Great European War, when the demand for its oil in Europe and America was immensely multiplied owing to the shortage of other kinds of oil.

The progress of the bean trade for past 46 years is shown in the following tables, in which the average figures for each decennial are given for the first 30 years, and the annual figures for later years.

The first table refers to the time when Newchwang² was the sole open port, while the rest refer to the subsequent period when the outlet for beans was diverted to other ports.

Year	Beans		Bean Cakes		Bean Oil	
	Quantity	Value	Quantity	Value	Quantity	Value
	Piculs	Hk. Tls.	Piculs	Hk. Tls.	Piculs	Hk. Tls.
Average 10 years from 1872 to 1881...	1,633,513	1,478,260	1,105,171	794,170	17,306	52,288
Average 10 years from 1882 to 1891...	2,510,703	2,375,957	1,996,757	1,525,917	26,977	67,567

1 Dairen (大連). 2 Newchwang (牛莊).

Year	Beans		Bean Cakes		Bean Oil	
	Quantity	Value	Quantity	Value	Quantity	Value
	Piculs	Hk. Tls.	Piculs	Hk. Tls.	Piculs	Hk. Tls.
Average 10 years from 1892 to 1901...	3,684,370	6,368,254	2,994,992	3,863,265	118,157	645,810
1902 ...	3,430,305	6,556,706	4,637,273	6,445,808	281,242	1,311,374
1903 ...	3,423,766	6,852,592	4,553,367	7,057,718	111,595	725,352
1904 ...	1,827,368	4,461,049	1,986,172	3,726,485	71,755	563,990
1905 ...	1,483,241	4,630,553	1,715,058	4,201,893	26,237	254,498
1906 ...	2,061,507	4,408,285	3,662,824	6,776,224	96,457	665,553

For the figures for later years, when beans were exported not only from Newchwang¹ but also from Dairen² and Vladivostock, see the tables compiled by Messrs. Mitsui & Company of Dairen,³ facing the page.

Imports.—The articles of import by Manchuria are more varied in kind than those of its export. But the leading place is held by cotton piece goods and yarns, which two articles alone amounted in 1917 to Hk. Tls. 38,825,603, or 26 per cent. of the whole imports. These are followed by Tls. 7,507,976 of iron and steel, Tls. 7,333,251 of clothing and accessories, Tls. 7,019,261 of tobacco and cigarettes, Tls. 6,423,459 of machines and tools, Tls. 5,970,727 of skin leather, horn, etc.

Cotton Piece Goods and Yarns: These two most important imports of Manchuria have considerably increased in their amount and value of late. The import of them in 1907 was valued at Tls. 7,980,000, and this increased to Tls. 24,580,000 in 1913, which means an increase of seven-

1 Newchwang (牛莊). 2 Dairen (大連).

fold in six years, and even in 1915, when most imports suffered a great deal from the European War, the amount did not come down much below Tls. 20,000,000, and in 1917 it reached the unprecedented figures of Tls. 38,825,603, showing an increase of nearly five times in the past decade.

The various kinds of cotton goods imported into Manchuria are shown below :

Articles	Quantity	1916	1917	1918
Shirtings, Grey, Plain, American Pcs.		11,014	1,287	165
Shirtings, Grey, Plain, English "		60,518	54,447	34,979
Shirtings, Grey, Plain, Japanese "		93,444	423,336	403,080
Shirtings, Grey, Plain, Others... .. "		320	2,452	708
Sheetings, Grey, Plain American "		155,540	100,710	28,391
Sheetings, Grey, Plain, English... .. "		30,252	11,416	998
Sheetings, Grey, Plain, Japanese "		1,446,692	1,499,447	1,598,596
Sheetings, Grey, Plain, Others "		16,144	13,052	16,185
Shirtings, White, Plain, English "		84,039	97,200	43,682
Shirtings, White, Plain, Japanese "		40,600	93,115	168,553
Shirtings, White, Plain, Others "		198,821	242,450	263,481
Shirtings and Sheetings, White, Plain "		2,467	7,078	9,660
Shirtings, Figured, Bro- cade'd, and Spotted "		60	—	—
White Irish "		500	400	—
Drills, American		49,157	3,830	100
" American, and Dyed Drills "		2,995	3,198	17,361

Articles	Quantity	1916	1917	1918
Drills, English Pcs.		1,876	1,992	1,165
„ Japanese „		598,534	468,941	511,638
„ Others „		94	88	257
Jeans, American „		—	320	1,360
„ English „		139,809	101,772	59,787
„ Japanese „		740,145	812,032	1,184,885
„ Others „		—	—	60
T-cloths, English „		6,315	4,926	9,959
„ Japanese... .. „		44,681	71,318	58,722
„ Grey „		830	3,767	4,793
Printed Cottons :—				
Cambrics, Lawns and Muslins, Various „		10,769	17,915	21,327
Plain Cotton Prints „		4,251	73,568	260,860
Chintzes and Plain Cotton Prints „		74,125	86,479	80,900
Reversible Cretonnes, Yards		97,045	625	—
Sateens, Reps, etc. ... Pcs.		3,621	649	152
Turkey Red Cottons and Dyed T-cloths „		36,170	64,546	152,245
Turkey Red Cambrics and Shirtings „		5,692	3,410	5,050
Dyed Cottons :—				
Shirtings and Sheetings, Plain „		15,072	31,825	31,071
Italians, Venetians, Crape, and Lastings, Plain „		25,013	82,812	138,504
Italians, Venetians, Crape, and Lastings, Plain, Fast black „		34,880	48,149	76,898
Italians, Venetians, Poplins, Crape, and Lastings, Figured „		18,750	34,123	49,826
Italians, Venetians, Poplins, and Coloured „		26,709	54,368	114,566
Lastings, Plain „		102	230	949
„ Figured „		216	—	354

Articles	Quantity	1916	1917	1918
Poplins, Plain Pcs.		7,345	13,190	15,148
„ Figured „		12,275	16,086	35,390
Jeans „		—	163	327
Drills and Silesias „		25,063	136,999	255,557
„ , Japanese „		11,720	67,532	31,657
Sateens, Reps, and Ribs „		8,527	1,801	—
Cambrics, Lawns, and Muslins „		215	—	—
Cotton Italians, Plain and Figured „		22,073	24,252	14,880
Cotton Venetians, Plain and Figured „		25,713	19,508	15,389
Cotton Lastings, Plain and Figured „		9,013	6,008	12,609
Cotton Poplins, Plain and Figured „		10,828	11,694	7,929
Drills Furnitures and Twills „		808	—	30
Flannelettes, Plain, Dyed, or Printed „		98,564	141,167	198,224
Flannelettes, Japanese „		53,809	102,333	17,540
Lawns, White „		200	263	363
Cotton Lenos „		15	—	—
Cottons, Yarn-dyed ... Yards		200	267,973	114,393
Japanese Cotton Cloth... .. „	106,521,994	151,353,859	112,250,875	
„ „ Crape... .. „	712,460	3,047,982	730,202	
„ „ Stripes. „	428,120	1,081,155	—	
Fancy Woven Cottons, Japanese „	3,617,056	11,337,401	3,164,468	
Fancy Woven Cottons, Others „	3,614,976	11,335,427	3,158,388	
Imitation Native Cloth, Various kinds, Japanese Pcs.	1,924,913	2,040,741	2,140,482	
Velvet and Velveteens... Yards	611,775	517,483	354,618	
Velvet Cords „	52	1,350	1,397	
Moleskin Cloth „	—	531	—	
„ „ , Dyed „	3,866	4,936	—	
Mosquitto Netting... .. „	6,300	12,235	19,187	

Articles	Quantity	1916	1917	1918
Cotton Blankets Pcs.		263,488	455,620	300,892
" " , Japanese "		69,761	182,607	58,486
Handkerchiefs Doz.		261,804	272,484	283,762
" " , Japanese... "		24,051	39,032	17,178
Towels "		314,840	425,459	525,029
" " , Japanese "		204,697	182,501	116,944
Cotton Goods, Unenumerated "		2,988,148	3,145,174	3,150,800
Cotton Yarn, English ... Pcls.		9	—	—
" " Hongkong ¹ "		30	2,736	—
" " Indian ... "		34,932	32,116	19,313
" " Japanese... "		183,476	234,421	173,187
Cotton Thread, in Balls... "		266	696	487
" " , on Spools "		101,680	90,867	182,169

Before the Russo-Japanese War the Manchurian markets for these goods were practically monopolized by English, American, and Indian goods, England holding the leading place in shirtings, America in sheetings, drills, and jeans, and India in yarns. After the war Japanese goods entered the list, and so successfully competed with their rivals that at the time of the outbreak of the European War almost all cotton goods, except the finest kinds, were supplied by Japan. The European War, crippling the cotton mills in the Western countries and also ocean transportation, accelerated this tendency, and at this moment Japan holds the undisputed supremacy in the cotton goods trade of Manchuria.

Another point worthy of note is that, in other parts of China, the import of cotton yarns nearly matches by itself that of all kinds of cotton piece goods put together, and in

¹ Hongkong (香港).

the Japan-China trade the former even exceeds the latter. But in Manchuria the reverse is the case, as instanced by the trade returns for 1917 when the import of yarns amounted to only Hk. Tls. 8,885,580 against Tls. 29,940,023 of piece goods. This is apparently due to the undeveloped state of Manchurian industry as compared with that of other parts of China.

Foreign Trade of Manchuria According to Countries:—Since the opening of Manchuria to foreign trade Japan has always been the greatest foreign buyer of its products, but not always the greatest seller. Record has it that in 1891 Manchuria exported to Japan to the value of Tls. 460,354, while importing from it only Tls. 22,022. The Russo-Japanese War proved a great stimulus to the import trade of Manchuria from Japan, and in 1905 it reached Tls. 5,140,251, while its exports to Japan also increased to Tls. 6,220,973. This remarkable progress in import from Japan was partly due to the industrial development of Japan, which enabled it to supply Manchuria with what had hitherto been supplied to it by Western countries, but the chief reason must be sought in the prosperous export trade of that country caused by the unprecedented demand then created for Manchurian beans and bean cake. The vessel bound for Newchwang¹ from Japan to carry back these commodities on their return trip would naturally seek to fill their hatches on their outward trip, and this circumstance reduced the freight charges for goods from Japan to Newchwang¹ to an extent impossible under other circumstances. For this and many other

¹ Newchwang (牛莊).

reasons the trade between Japan and Manchuria increased by leaps and bounds, and, even before the outbreak of the Great European War, 75 per cent. of imports and 85 per cent. of exports were made from and to Japan. The Great War still further affected the import trade in favour of Japan, and, in 1917, of the total import of Hk. Tls. 91,642,633 no less than Hk. Tls. 77,338,849 or 85 per cent. was from Japan. But the export trade was somewhat differently affected. The export to Japan increased in absolute amount, but the percentage of it to that to other countries declined to 70 per cent., the demand for Manchurian products in other quarters of the world largely accounting for this.

*Recent Growth of Dairen*¹:—Two events stand out prominently in Manchuria's recent economic history; one of these is the rise of a great export trade in beans, and the other the growth of Dairen¹ as a world trading port. The former having already been dealt with, it is about the latter that we propose now to write.

The position of Dairen¹ with respect to other Manchurian ports is one of absolute superiority. Of the total import of Manchuria in 1918 amounting to Hk. Tls. 142,098,819, Dairen¹ alone imported Hk. Tls. 79,811,474, or a little more than 56 per cent., and of its exports amounting to Hk. Tls. 125,105,782 it alone exported Hk. Tls. 86,012,733, or 68.75 per cent. Newchwang² has fallen far behind, and Antung,³ with all its recent progress, is in no respect in a position to bear comparison with the great southern port.

1 Dairen (大連). 2 Newchwang (牛莊) 3 Antung (安東).

The remarkable progress of the port in recent years is best shown by its comparison with other Chinese ports, and for this purpose let us take the five great ports of China, viz., Shanghai,¹ Hankow,² Tientsin,³ Canton,⁴ and Dairen,⁵ each of which has had a trade exceeding Hk. Tls. 100,000,000 in recent years. The respective position of these ports in 1908, that is ten years ago, may be seen from the following table:

Port					Trade Hk. Tls.
Trade amount for 1908	Shanghai ¹	...	...	...	137,801,020
	Hankow ²	...	...	...	120,035,293
	Canton ⁴	...	...	...	103,696,530
	Tientsin ³	...	...	...	79,454,733
	Dairen ⁵	...	...	...	32,258,461
	Other ports	...	...	...	361,748,048
Total					834,997,085

In that year the four ports of Shanghai,¹ Hankow,² Canton,⁴ and Tientsin³ ranked as given with not much difference between them, while Dairen⁵ was in no way qualified to be listed with them. It was rather Newchwang,⁶ if selection of one of the Manchurian ports was to be made, that should have been added to the list. The subsequent ten years saw a great change taking place in the respective positions of the Chinese ports. The following table was prepared on the same plan as the preceding one at the end of 1918.

1 Shanghai (上海). 2 Hankow (漢口). 3 Tientsin (天津). 4 Canton (奧海). 5 Dairen (大連). 6 Newchwang (牛莊).

	Port					Trade
						Uk. Tls.
Trade amount for 1918	Shanghai ¹	...	...	...	...	323,998,501
	Dairen ²	...	...	...	...	165,824,207
	Hankow ³	...	...	...	...	165,162,303
	Tientsin ⁴	...	...	...	...	153,136,643
	Canton ⁵	...	...	...	...	103,226,078
	Other ports	...	...	...	...	404,258,882
	Total	...	...	...	...	1,315,608,619

The position of Shanghai¹ has been greatly strengthened during the past decade and is apparently rendered unassailable, but the most wonderful fact is the rise of Dairen² from the 42nd to the 2nd position in the trade returns of the Chinese Maritime Customs during the period. This position of Dairen² is, it is true, far from being safe, being very closely followed by Hankow³ and Tientsin⁴; it may fall to the 3rd or possibly to the 4th place during the next few years, but there is no doubt that it will distance the others more and more as time goes on, that its position as the second port in China will become equally secure as the position of Shanghai¹ as the first port.

Some Special Features in Manchurian Customs Regulations :—The Customs duty in China is levied at the rate of 5 per cent. *ad valorem* on both imports and exports, with the exception of certain articles on which a specific duty, according to the conventional tariff, is levied. So far it does not differ much from the usage of other countries. There are, however, several other kinds of duties or dues

1 Shanghai (上海). 2 Dairen (大連). 3 Hankow (漢口). 4 Tientsin (天津). 5 Canton (奧海).

which do not exist in other countries. They are all of domestic nature, and are so complicated that a full description of them is a task incompatible with the briefness of this work. Roughly classified, however, they may be divided into Coast Trade Duty (*yenanmaoishui*¹), Transit Dues (*tzukoushui*² or *titaishui*³), Native Customs Duty (*changkuanshui*⁴), and *Likin*.⁵ The coast trade duty, as its name indicates, is a duty on exports and imports between Chinese ports. The import duty is the same as, and the export duty half, the rate charged in the foreign trade, and since in China coasting trade by foreign vessels is permitted, the tariff thereof is also subject to treaties with foreign powers. The transit dues comprise a duty which, once paid, abrogates all other domestic dues hereafter mentioned, in other words, they take the place of all other domestic dues. The rate is fixed at half the regular export and import duties for all dutiable goods, and $2\frac{1}{2}$ per cent. *ad valorem* for all duty-free goods. The native Customs duty is one charged by the native Customs chiefly on goods by native junks, and the rate is also fixed at $2\frac{1}{2}$ per cent. *ad valorem*. The *likin*⁵ is a duty, the nature of which is most complicated. In a word it is a local tax levied by provincial authorities on goods in movement, and may roughly be divided into three kinds, levied respectively on goods outgoing, passing, and arrived. The *likin*⁵ tax in Manchuria is chiefly confined to those on goods outgoing and arrived, and there are few instances of the midway or passing tax being levied, excepting in the case of goods sent from one

1 *yenanmaoishui* (沿岸貿易稅). 2 *tzukoushui* (子口稅). 3 *titaishui* (抵代稅). 4 *changkuanshui* (常關稅). 5 *Likin* (

place to another in the same province but passing through a third. The rate of the tax is not definitely fixed, it being left to the provincial authorities, and in extreme cases it is said to be fixed by haggling between the authorities and traders in each case. Mukden¹ Province charges 3 per cent. *ad valorem* on outgoing beans and pulse, and 1 per cent. on grains, while the incoming goods are invariably charged 2 per cent. *ad valorem*.

The above rules and customs are in force in Manchuria as in the other parts of China, but there are some important exceptions to them now to be enumerated. (1) Reduction in tariff for land trade; (2) Reduction in transit dues; (3) Remission of domestic dues in certain cases; (4) Duty-free goods special to Manchuria; (5) Removal of export embargo on certain goods; (6) Special system for Kwantung² Province. These will be taken in order and considered.

(1) Reduction in Tariff for Land Trade: A reduction of one-third of the regular tariff rate is made on all imports and exports to and from Manchuria by railway. The system had its origin in the Russo-Chinese Convention concerning the Chinese Eastern Railway, which provided that, "for the goods transported from Manchuria to Russia and from Russia to Manchuria via the Chinese Eastern Railway the tariff will be reduced by one-third as compared with the conventional tariff agreed upon by treaties." A similar provision exists as regards the goods transported by the water-ways of the Sungari,³ which says "that the grains only exported from Harbin by water-way shall have their

1 Mukden (奉天). 2 Kwantung (關東). 3 Sungari (松花江).

tariff reduced by one-third." The application of this system to South Manchuria dates from May, 1913, when it was arranged between the two Governments that "for the dutiable goods destined from Manchuria to any place beyond Shinwiju¹ and from any place beyond Shinwiju¹ to Manchuria by railway will be charged export and import duties corresponding to two-thirds of the Maritime Customs tariff." This special arrangement with regard to the land trade, coupled with a reduction in the railway freight charges, has produced a considerable change in the trade route of Manchuria, in that the goods hitherto imported into Manchuria through Dairen² have come to be imported through Chosen, resulting in the great development of the port of Antung.³

(2) Reduction in Transit Dues: This is but the natural sequence of the above-mentioned reduction as regards the land trade. The transit dues are generally fixed in China at half the regular Maritime Customs tariff, and since, in the cases of land trade, it is required to pay one-half the reduced tariff, it actually amounts to one-third the regular Maritime Customs tariff. But this is applied only to dutiable goods; for duty-free goods the general rule holds good.

(3) Remission of Domestic Dues in Certain Cases: It has already been explained that Manchuria has certain areas called *shangfouti*⁴ (trade spheres) established by treaty stipulations. The goods destined to these places are exempted from the *likin*⁵ taxes, even though the transit

1 Shinwiju (新義州). 2 Dairen (大連). 3 Antung (安東). 4 *shang-fouti* (商埠地). 5 *likin* (釐金).

dues are not previously paid thereon, and this is effected by means of a permit delivered by the Customs authorities to the applicant on proving that the goods are destined to them. This special arrangement with regard to *shangfouti*¹ has contributed much to the prosperity of certain towns enjoying the privilege. In North Manchuria each station on the Chinese Eastern Railway has a duty-free zone around it extending, measured by its radius, from 1 to 5 Russian miles, but in South Manchuria there exists none of the kind.

(4) Duty-free Goods Special to Manchuria: Over 20 articles in addition to those enlisted as duty-free goods in the Chinese Customs tariff are exempted from duties when imported through the Russo-Chinese frontier Customs. No similar provision exists for the frontier trade between Manchuria and Chosen.

(5) Removal of Export Embargo on Certain Goods: China as a whole does not permit the export of grain, but this embargo has long been removed so far as it concerns the Russo-Chinese trade in North Manchuria by an agreement entered into between the countries. The same treatment has lately been accorded to South Manchuria, and now six articles, wheat, wheat flour, *kaoliang*, corn, millet, and buckwheat, are permitted exportation, provided that, in the case of a poor crop in Manchuria, one or more of them may be placed under embargo with one month's notice. This proviso has often been put into force, and at this very moment the question is receiving the attention of the authorities concerned on account of the drought that has prevailed for some time past.

¹ *shangfouti* (

(6) Special System for Kwantung¹ Province: This system was founded by virtue of the Agreement concerning the establishment of the Dairen² Customs entered into between the Japanese and Chinese Governments in May, 1907. It is a free port system on a grand scale, covering the whole leased territory of Kwantung,¹ and may be roughly explained as follows:

(a) Import duty is levied on goods conveyed to Dairen² by sea only when such goods enter the hinterland across the frontier of the leased territory.

(b) Export duty is levied on goods conveyed from the hinterland to Dairen² only when such goods are exported by sea to other places. In case the products of the hinterland are exported by sea to other places after being wrought upon in the leased territory, the duty may be levied on the materials or on the manufactured articles according to the choice of the applicant.

(c) In case the articles manufactured in the leased territories, using as materials the products of the leased territory, or the articles imported by sea, are conveyed overland to the hinterland, the duty shall be levied on the manufactured articles.

In case the articles manufactured from materials imported from the hinterland are re-conveyed to the hinterland, the duty thereon shall be remitted on proving the fact according to a fixed condition.

(d) The foreign goods imported into Dairen² from one of the treaty ports of China may have the whole of the duty paid at the previous port of import returned, so long as such goods fulfil the treaty conditions.

¹ Kwantung (關東). ² Dairen (大連).

CHAPTER IX

CURRENCY

Attempts at currency reform in China; Currencies in Manchuria; Native monies; Paper currencies; Foreign monies — (1) Japanese military notes, (2) Yokohama Specie Bank silver note, (3) The Bank of Chosen note, (4) The Russian rouble notes.

Attempts at Currency Reform in China :—There were minted in China copper coins as early as the beginning of the Chow¹ Dynasty (1122-249 B.C.), and, so far as the art of minting money is concerned, the country has since made considerable progress, and the year 1890 saw her making an attempt to model her coins after the the Western fashion. But she appears never to have had a uniform coinage system, and the confusion thereby caused has made it necessary for her to make frequent attempts at coinage reform. Such attempts in the past however merely amounted to the issue of new currencies, and, since no effective steps were taken for the withdrawal of the old, conditions after the so-called currency reforms were generally worse than those preceding them, there being more currencies to complicate them. This state of affairs was not only inimical to the economic welfare of her people, but was insufferable to the peoples trading with her. Thus England made her promise to establish a proper coinage system in the Anglo-Chinese

¹ Chow (周).

agreement of 1902, and the example was followed by Japan, America, and other countries in their respective commercial treaties with China. Many plans have been worked out by the Chinese authorities to make these promises good, but so far without success. The one which, if acted upon, would have led to great improvement in her currency was formulated in 1910 on a silver basis. Unfortunately the next year saw the first revolution, which overthrew the old régime and resulted in the establishment of a republic in China, break out and the new coins made on the above plan were thrown into military chest even without any law accompanying them, and were soon absorbed in the whirlpool of older currencies. On the establishment of the Republic, Yuan Shikai,¹ the President of the New Republic, caused to be formed in the Finance Department a monetary commission with a view to investigating a new system of currency that might be adopted by China with advantage. The commission drafted three plans which were based respectively on a silver, a gold-exchange, a bi-metal standard. The decision was given in favour of the one on a silver basis, and the result was the promulgation of the National Coinage Regulations in February, 1914. By these regulations the Government was vested with the exclusive right of coinage and of the issue of the national currency, the unit of which was fixed at 6 *chien*² 4 *fen*³ 8 *li*⁴ (Kuping⁵) of pure silver, to be called a *yuan*⁶; the calculation of the money was based upon the decimal system, one-tenth of a *yuan*⁶ being called a *chiao*,⁷ one-hundredth a *fen*,³ and one-thousandth a *li*⁴; the

1 Yuan Shikai (袁世凱). 2 *chien* (錢). 3 *fen* (分). 4 *li* (厘). 5 Kuping (庫平). 6 *yuan* (元). 7 *chiao* (角).

coinage was of silver, nickel, and copper, and the silver coins were 1 *yuan*,¹ $\frac{1}{2}$ *yuan*,¹ and 2 *chiao*,² the nickel coin, 5 *fen*,³ and the copper coins, 2 *fen*,³ one *fen*,³ 5 *li*,⁴ 2 *li*,⁴ and 1 *li*;⁴ the weight of 1 *yuan*¹ silver was fixed at 7 *chien*⁵ 2 *fen*³; that of 5 *fen*³ nickel at 7 *fen*³; the 2 *fen*³ copper at 2 *chien*⁵ 8 *fen*,³ and so forth, while the fineness of the standard silver money was fixed at 900, and that of subsidiary coins at 700, and so forth; the 1 *yuan*¹ silver was made the legal tender with no restrictions with regard to its circulation, while restrictions were prescribed for the subsidiary coins, and the legal tender money was to be minted by the Government on application, charging mintage at the rate of 6 *li*⁴ (Kuping⁶) per *yuan*.¹

Further, the regulations provided for mintage allowances, the exchange of damaged coins, etc., and to all appearances it was a coinage law worthy of any nation. In March, 1914, a currency bureau was established, and at one time it seemed as if the long-standing question had finally taken the decisive step towards its solution. But it was soon found that the scheme was destined to no better luck than those preceding it. China was depending on foreign loans for the funds required for carrying out the reform, but in this she was sadly disappointed, for the Great European War broke out in August, 1914, and cut her off from those sources from which she expected help. The coinage regulations in consequence have ever since remained dead letters. The new coin, with Yuan Shikai's⁷ head on it, was minted and issued, but, there being no law accompanying it, it only served to complicate the currency by adding a new species.

1 *yuan* (圓). 2 *chiao* (角). 3 *fen* (分). 4 *li* (厘). 5 *chien* (錢). 6 Kuping (庫平). 7 Yuan Shikai (袁世凱).

The latest attempt at currency reform was made by China in August, 1918, when her Government issued what is known as the Gold Note Regulations, and changes were introduced in the system of the office charged with the control of currency. The gold note regulations were an attempt at a coinage system on a gold basis. According to these regulations, the Government was to appoint certain banks to issue gold notes of denomination of 1, 5, 10, 20, 50, and 100 *yuan*¹; the unit of the currency was 1 gold *yuan*² containing 2.01688 *fen*³ (Kuping³) of pure gold; prior to the completion of the minting of the gold coin, the bearer of the gold notes was allowed to purchase therewith drafts on another place in China or on foreign countries at appointed banks, and on the completion of the minting of the gold coin to have them converted into gold coin should they so prefer. The scheme was bitterly opposed by various chambers of commerce and also by the the press in general. The scheme was dropped.

Thus the currency of present-day China is no better than that of China of by-gone days, and nothing definite is being done to better its condition. There is still no fixed currency system, what there is is a conglomeration of innumerable different kinds of money with little or no connection between them. Some of these monies are on a copper basis, some on a silver basis, and some on a gold basis, while some are issued by the central Government, some by the provincial Governments, and some by private persons, and they all circulate side by side with no fixed rate against one another. From one point of view China

¹ *yuan* (元). ² *fen* (分). ³ Kuping (庫平).

may be said to be still lingering between the ages of uncoined money and coined money, since such ingots as sycee¹ can hardly be called a coined money.

Currencies in Manchuria :—Such being the condition of currency in China as a whole, Manchuria is no exception to this general disorder. Every province, nay, every locality has some kind of currency peculiar to it, or attaches a different value to the same currency, and it may be said without exaggeration that there are no two cities having a currency exactly the same. The following monies are now in circulation in Manchuria.

Chinese currency	{	Coins	{ Cash (<i>chihchien</i>), ² Copper coin (<i>tungyuan</i>), ³ Silver dollar (<i>yangchien</i>), ⁴ Sycee ¹ (<i>yinting</i>). ¹
		Notes	{ Government notes (<i>kuantieh</i>), ⁵ Copper coin notes (<i>tungyuanpiao</i>), ⁶ Silver dollar notes (<i>yangchienpiao</i>). ⁷
Foreign currency	{	Coins	{ Japanese silver yen, Mexican dollar, Japanese and Russian subsidiary coins.
		Notes	{ Japanese military notes, Bank of Japan notes, Bank of Chosen notes, Yokohama Specie Bank notes, Russian rouble notes.

A brief description of each of the above will now be given.

Native Monies :—(a) Cash (*Chihchien*²) : The oldest coin of China, made of copper, round in form with a square hole in the centre, cash is found in her records as early as

1 sycee or *yinting* (銀錠). 2 *chihchien* (制錢). 3 *tungyuan* (銅元).
4 *yangchien* (洋錢). 5 *kuantieh* (官帖). 6 *tungyuanpiao* (銅元票). 7 *yang-
chienpiao* (洋錢票).

the beginning of the Chow¹ Dynasty. It is called by several different names, such as *yangchien*², *chihchien*³, *ssuchien*⁴ according to who minted it. Originally the term *chihchien*³ was applied to the one minted by the provincial government, but it has now come to be applied to all kinds of cash. Cash is reckoned in terms of *tiao*⁵ and *wen*⁶, and originally one cash was one *wen*⁶, and a thousand *wen*⁶ made one *tiao*⁵. But the manner reckoning cash differs absolutely now according to locality. In some places 1,000 cash, as of old, are reckoned as one *tiao*⁵, while in others 980, 500, or even 160 are called one *tiao*⁵. Mukden⁷ counts 160 cash as one *tiao*⁵ while at Kirin⁸ one *tiao*⁵ is generally made up of 500 cash.

Cash used to be universally current in China, but its circulation has considerably decreased of late owing to the closing-down of its mints, as well as to the exportation of it abroad in consequence of the high price of copper.

In Manchuria it has practically disappeared from all the towns along the railways, and is rarely found anywhere in the country except in a few out-of-the-way places. Cash itself is, therefore, hardly worth describing as a currency, but, having circulated for many centuries in days gone by, the *tiao*⁵ and *wen*⁶ in terms of which it was reckoned are still used as the base for valuation in small local transactions. Nor is this all. The new copper coin and the Government note, which will be described later, were originally issued on the basis of cash, and are still calculated in terms of *tiao*⁵ and *wen*⁶. Some knowledge of this coin is, therefore, indispens-

1 Chow (周). 2 *yangchien* (洋錢). 3 *chihchien* (制錢). 4 *ssuchien* (私錢). 5 *tiao* (吊). 6 *wen* (文). 7 Mukden (奉天). 8 Kirin (吉林).

able for those who care to know anything about the Manchurian coinage.

(b) Copper Coin (*Tungyuan*¹): If the native term *yinyuan*² is translated, as is usually the case, as silver dollar, *tungyuan*¹ should be translated as copper dollar. Both are modelled after the Western fashion, and one not familiar with things Chinese would take them for the standard and subsidiary coin. But such is not the case; they have no connection whatever; on the contrary, the value of *tungyuan*¹ is based upon cash.

The copper coin was first minted in 1900 by the Provincial Government of Canton.³ Two years later, with a view to relieving the scarcity of cash, the minting of which had been discontinued since the Taiping Rebellion, the Government ordered provincial governments to mint copper coins after the Western fashion. In deference to this order, both Mukden⁴ and Kirin⁵ Governments established mints and turned out such coins in large amounts. The value of a copper dollar is measured by cash, and it has inscribed on it Chinese characters signifying that it corresponds to 5 cash, 10 cash, or 20 cash, as the case may be. The coin was very popular at the beginning, being more regularly minted than the old cash, but it was not long before the greed for mintage profit resulted in debasing its quality. The real value of it fell below the one it professed, and thus its connection with cash was severed. At one time however, it circulated in large amounts and so formed an indispensable currency in Manchuria and elsewhere. Later,

¹ *tungyuan* (銅元). ² *yinyuan* (銀元). ³ Canton (廣州). ⁴ Mukden (奉天). ⁵ Kirin (吉林).

the Government ordered the closing of some of its mints with a view to putting an end to the evil practices attending its coinage, in which the one at Kirin¹ was involved. Thus Manchuria was cut off from one of its greatest sources for its supply of the copper dollar. Besides, large amounts of the coin were taken home by coolies from Shantung² in the form of savings. All this resulted in reducing the copper coins in Manchuria to an extremely small amount, and at present they are used merely as small change.

Quite recently, however, the Provincial Government of Mukden³ resumed the minting of the copper dollar, and has even taken steps to issue notes on it conferring a *cours forcé* on such notes. Evidently this course was resorted to to ward off the impending difficulty with regard to the conversion of the silver notes, but it will be fortunate if all these patch work measures do not result in further complicating the already complicated money conditions in Manchuria.

(c) *Yangchien*⁴: This most important native coin in Manchuria is also called *yinyuan*,⁵ and closely resembles the Japanese silver coin, being modelled after the Western fashion. It was first minted in Canton⁶ by Chang Chihtung,⁷ the Governor of the Province, in 1889, or eleven years prior to the minting of *tungyuan*.⁸ The following year the Government of China issued an ordinance which, while permitting the minting of silver coins by the provincial governments, defined the denominations and the fineness and weight for each denomination as follows:

1 Kirin (吉林). 2 Shantung (山東). 3 Mukden (奉天). 4 *Yangchien* (洋錢). 5 *yinyuan* (銀元). 6 Canton (廣州). 7 Chang Chihtung (張之洞). 8 *tungyuan* (銅元).

Denomination	Weight (Kuping) ¹		Fineness
1 <i>yuan</i> ²	7 <i>chien</i> ³	2 <i>fen</i> ⁴	900
5 <i>chiao</i> ⁵	3 <i>chien</i>	6 <i>fen</i>	860
2 <i>chiao</i>	1 <i>chien</i>	4 <i>fen</i> 4 <i>li</i> ⁶	820
1 <i>chiao</i>		7 <i>fen</i> 2 <i>li</i>	820
5 <i>fen</i> ⁴		3 <i>fen</i> 6 <i>li</i>	820

Evidently the ordinance intended the 1 *yuan*² silver to be the standard money and the others for its subsidiaries, hence reducing the fineness of the coins under 5 *chiao*.⁵ But the provincial governments, whose first object in minting coins was the mintage profit accruing from it, were more anxious to coin the subsidiary coins than the standard one, the mintage profit from the former being larger than that from the latter. The result is shown by the following figures prepared by the currency controller of the Financial Department (*Tsaiwupu Chuanpiszu*⁷), in which the total amount of silver coins minted by provincial governments from the beginning down to the close of 1913 is shown.

Denomination Silver	Minted Amount <i>Yuan</i> ² or dollars
1 <i>yuan</i> ²	206,028,152
5 <i>chiao</i> ⁵	16,139,710
2½ <i>chiao</i>	285,250
2 <i>chiao</i>	246,572,088
1 <i>chiao</i>	23,500,421
5 <i>fen</i> ⁴	258,733

It may be noted from the above that they minted altogether 286,000,000 dollars of subsidiary coins against 206,000,000 dollars of the standard coin. When Manchuria

1 Kuping (庫平). 2 *yuan* (元). 3 *chien* (錢). 4 *fen* (分). 5 *chiao* (角). 6 *li* (厘). 7 *Tsaiwupu Chuanpiszu* (財務局泉幣司).

alone is considered, the disparity is still more striking, for of the 60,430,000 dollars minted, 45,790,000 dollars or 76 per cent. was o. coins under 5 *chiao*.¹ It is obvious that the relationship of standard and subsidiary coins originally intended for the different grades of the silver coins could not be maintained under such circumstances. Each became an independent currency.

In Manchuria *yangchien*² is roughly divided into two groups. The term *tayangchien*³ signifying large *yangchien*² is applied to the one *yuan*⁴ silver, while the rest are called by the generic term *hsiaoyangchien*⁵ signifying small *yangchien*.² The two groups are independent of each other, and each has a quotation of its own. Those mostly in circulation in Manchuria are *hsiaoyangchien*.⁵ Especially in the province of Mukden⁵ was the circulation of small *yangchien*² so universal that at one time it seemed not altogether unlikely that the native currency of the province might be unified under its régime. Unfortunately, however, the further coinage of *yangchien*² was rendered impossible by the financial embarrassment of the provincial government, coupled with the world-wide appreciation in the price of silver consequent upon the European War. Unable to issue more hard money, it began issuing notes, nominally against small *yangchien*.² The consequence was that all good money was driven out of circulation, leaving the market to the care of doubtful notes. Thus things stand now, and so scarce are the silver coins at present that it is no easy task

1 *chiao* (角). 2 *yangchien* (洋錢). 3 *tayangchien* (大洋錢). 4 *yuan* (元).
5 *hsiaoyangchien* (小洋錢).

to collect them to the amount of a few hundred dollars, even in such a large market as Mukden.¹

The *tayangchien*² has circulated but little in Manchuria from the very beginning, owing to the smallness of the amount minted, a good part of which was further driven out of circulation by the smaller coins. A small amount of it is, however, circulating in and around Mukden,¹ owing to the fact that the Peking-Mukden³ Railway did not receive until recently any other coins for its fare.

(d) Sycee⁴: Shoe silver or sycee,⁴ as it is called by Westerners, is called by the native *yinting*⁴ and, as the name implies, is a silver ingot that passes as money by weight. There are different kinds of sycee,⁴ which, according to form and size, bear the different names of *yuanpaoyin*⁵ *chungting*,⁶ *hsiaoko*,⁷ *mienchinyin*,⁸ *paopaitzu*,⁹ *pienyin*¹⁰ etc. Of these, the *yuanpaoyin*⁵ is most important, the others being more or less of a subsidiary nature. The coin has a very remote origin, and is said to have been in use as early as 1270 A.D. It was once widely in use in Manchuria, and all transactions on a large scale appear to have been carried on by it. The recent development of the *kuoluyin*¹¹ system in Newchwang,¹² the financial chaos in the wake of the Revolution, and the rise in the price of silver were the agents that brought about the gradual diminution of the amount of sycee⁴ in circulation, and to-day it has practically disappeared from almost all places in Manchuria with the exception of

1 Mukden (奉天) 2 *tayangchien* (大洋錢). 3 Mukden-Peking (奉天北京). 4 Sycee or *yinting* (銀錠). 5 *yuanpaoyin* (元寶銀). 6 *chungting* (中錠). 7 *hsiaoko* (小顆). 8 *mienchinyin* (面勛銀). 9 *paopaitzu* (寶牌子). 10 *pienyin* (片銀). 11 *kuoluyin* (過爐銀). 12 Newchwang (牛莊).

Antung,¹ a town on the right bank of the Yalu² River. The *kuoluyin*³ system peculiar to Newchwang,⁴ which was originally based upon sycee,⁵ has since changed into a mere transfer system of *yangchien*⁶ notes, except that the term tael⁷ is still used through force of habit. It is only in Antung¹ that the shoe-silver is actually circulating. In that town all the transactions in staples and in the timber, for which the town is noted, are still carried on in sycee,⁵ and naturally there is always a good stock of it.

The minting of sycee⁵ is entirely left to private individuals, and those engaged in it are called *yinlu*.⁸ There is no fixed rule as to the fineness and weight of a sycee⁵ that holds good throughout the country. Locally, however, it is determined mostly by the Chambers of Commerce. Thus, Shanghai,⁹ Newchwang,⁴ Antung,¹ and other towns of note have each its own sycee.⁵ In Manchuria the weight of a sycee⁵ is fixed generally at 53 taels⁷ 5 *chien*¹⁰ by local scales, to say nothing of the fineness, but since the local scales differ more or less according to locality the actual weight of a sycee,⁵ though nominally the same, could not but differ accordingly. The actual weight of one tael⁷ and the weight corresponding to 100 taels⁷ at Newchwang⁴ at different places are shown below :

Places	One tael ⁷ as measured by the grain troy				Weight corresponding to 100 taels ⁷ at Newchwang ⁴
Newchwang ⁴	556.53				100.000
Antung ¹	563.21				98.814
Liaoyang ¹¹	567.66				98.040

1 Antung (安東). 2 Yalu (鴨綠江). 3 *kuoluyin* (過爐銀). 4 Newchwang (牛莊). 5 sycee (銀錠). 6 *yangchien* (洋錢). 7 tael (兩). 8 *yinlu* (銀爐). 9 Shanghai (上海). 10 *chien* (錢). 11 Liaoyang (遼陽).

Places	One tael ¹ as measured by the grain troy	Weight corresponding to 100 taels ¹ at Newchwang ²
Mukden ³	555.42	100.200
Tiehling ⁴	561.58	99.100
Kaiyuan ⁵	560.45	99.300
Changchun ⁶	553.43	100.560
Kirin ⁷	551.57	100.900
Chinchow ⁸	567.66	98.000

The question may naturally arise how then can the people of different places transact business in sycee,⁹ when the unit in which it is measured is so different? Two methods obtain in China for this purpose. The one is to have all the sycee⁹ that come in from other places melted down and remodelled according to the weight and fineness required by the established rules of the place before allowing them to circulate. The other is to have them examined and their weight and fineness inscribed upon them by a fixed institution called *Kungyuchu*¹⁰ before allowing them to circulate. In the latter case the calculation of the value of a sycee⁹ is based entirely upon the inscription borne by it. In Manchuria the former method was in vogue, but, in view of the great trouble that the process involves, the latter has been introduced of late. At any rate, the days for this cumbrous form of currency are numbered, and the subject will soon be one of mere academic interest.

Paper Currencies :—Thus far we have only considered metallic currencies; we shall now proceed to describe in brief the paper currency of Manchuria, which, at this

1 tael (兩). 2 Newchwang (牛莊). 3 Mukden (奉天). 4 Tiehling (鐵嶺). 5 Kaiyuan (開原). 6 Changchun (長春). 7 Kirin (吉林). 8 Chinchow (錦州). 9 sycee (銀錠). 10 *Kungyuchu* (公佑局).

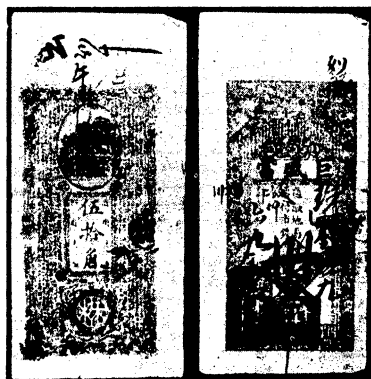
moment, is playing a rôle more important than any metallic currency there. The use of a paper currency by China may be dated back to the beginning of the Sung¹ Era (1000 A.D.) when the inhabitants of the Shu² districts made and circulated a note called *chiaotsu*³ for currency purposes. Under the governments of the Sung,¹ Yuan,⁴ and Ming⁵ Dynasties, which succeeded each other, notes were extensively used, and, in particular, the currency of the Yuan⁴ period chiefly consisted of them. The Government of Ching,⁶ taught by the experiences of its predecessors, wisely desisted at the beginning from using notes for currency, but it too was compelled to issue them in 1852 to replenish its treasury depleted by wars. An office was established in Peking,⁷ called *Kuanchienchu*,⁸ which issued notes on silver coins and cash. The example was followed by the provinces.

In Manchuria there was established in 1898 an office called *Kuantiehchu*⁹ at Kirin¹⁰ which issued government paper money. In 1905 the Hupu Bank,¹¹ which proved to be the progenitor of the present Bank of China, issued for the first time notes after the Western fashion, and the same year saw the establishment in Manchuria of the Government Bank of Mukden,¹² and the Amur Kungszu,¹³ a semi-official institution for the provincial government of Amur,¹⁴ both of which issued notes. In 1901 the Government Bank of Amur¹⁴ Province was established, and this also issued notes.

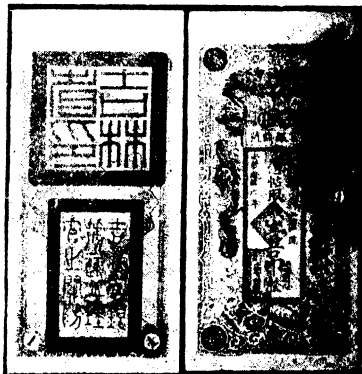
1 Sung (宋). 2 Shu (蜀). 3 *chiaotsu* (交子). 4 Yuan (元). 5 Ming (明). 6 Ching (清). 7 Peking (北京). 8 *Kuanchienchu* (官錢局). 9 *Kuantiehchu* (官帖局). 10 Kirin (吉林). 11 Hupu Bank (戶部銀行). 12 Mukden (奉天). 13 Amur Kungszu (黑龍江省公司). 14 Amur (黑龍江).



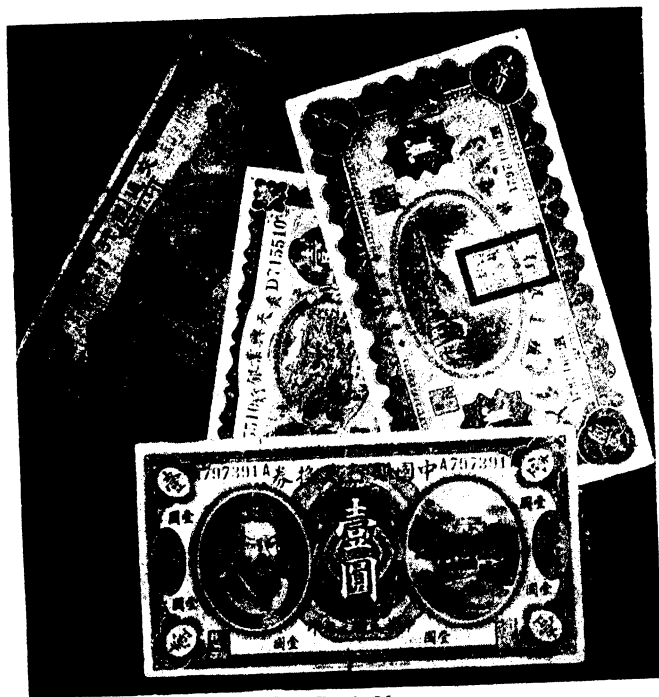
Sycee (銀錠)



Old Native Bank Notes



Provincial Cash Notes



New Bank Notes

Meanwhile, the indiscriminate issue of notes in every part of China and the evils resulting from it had become so intolerable that, unless some speedy measures were taken to suppress them, the result might be something awful. A set of regulations was therefore published in 1907 to govern note-issue. By these regulations all the old-style native banks were forbidden to issue any further notes, and ordered to call in speedily all that had been already issued. The regulations further provided for the cash reserve against which the notes were to be issued and inspection of them by the Government. So far the prohibition was confined to the old-style banks, and the new-style banks were still at liberty to issue notes, but another set of regulations published the next year made the rules applicable to all the institutions but the Bank of China, upon which alone the privilege of note-issue was conferred. The regulations provided that the notes that had been issued by the private institutions should be recalled annually at the rate of 20 per cent. of the total issue outstanding, so that all might be called in in five years, while as regards those issued by the provincial banks they should be recalled in such a manner as might be determined by the authorities upon consultation with the magistrates of the provinces concerned.

The regulations had apparently for their object the concentration of the note-issue power in one central bank, while getting rid of the notes of other banks as speedily as possible. Soon afterward, however, the Revolution broke out. The opportunity was eagerly seized by the provinces to issue notes, and the Manchurian Provinces were among those that issued them most recklessly. In the second year

of the establishment of the Republic, the new Government promulgated the Bank of China Act, Article XII of which provided that "the Bank issues convertible notes." The following year (1914) the same privilege was granted to the Bank of Communication and also to the Territorial Bank. This delegation of note-issuing power to more than one bank led people to doubt at one time whether the Government really did mean to carry out its policy of the central bank system, but this doubt was dispersed when the new regulations, clearly aimed at the centralization of the note-issuing power, were published in October, 1915.

The regulations set forth in unmistakable terms at the outset that all the banks, government or private, except the Bank of China, were subject to the present regulations, and that any slip of paper, printed or written, the amount on which had no fraction, bore no name of the beneficiary and no fixed date for payment, and stipulating that it should be converted into silver *liang*,¹ silver dollar, copper coin, or cash, should be regarded as paper money. In Article II it is provided that banking institutions to be established after the enforcement of these regulations, and those which, though established already, have not issued any notes, are not allowed to issue any notes, and in Article III, that those banking institutions which were allowed to issue notes before the enforcement of these regulations under special regulations would be allowed to issue notes for the remainder of the time granted, but on expiration of that time, however, they would be bound to call them in quickly, and that those institutions having no special regulations to back

¹ *liang* (兩).

them should not be allowed to issue notes beyond the average amount for three months immediately following the date of the enforcement of these regulations. The regulations further provide that all the notes issued according to Article III shall be backed by specie amounting at least to 50 per cent. of the amount, and the rest by Government bonds or commercial papers of a reliable nature.

Theoretically the regulations are now in force, but practically are dead letters, little heeded by any, including not only private institutions and provincial banks, but even such great Government institutions as the Bank of China and the Bank of Communication. It has become the usual practice of the provincial governments to relieve their financial embarrassment by the issue of new bank-notes through their official banks, little troubling themselves about the reserves they maintain. To these notes were added those issued by private bankers and commercial houses. These circumstances have made the condition of paper currency in China indescribably confusing, and to this, Manchuria is no exception. There are some dozen different banks and a large number of private merchants issuing notes, and the country is now practically under the régime of paper money.

Some of these notes are nominally convertible, some inconvertible, and still some are midway between the two, while as for their base, some are issued on cash, some on copper, and some on *yangchien*.¹ Hundreds of names exist to designate these different kinds of notes, but they may be roughly classified under seven heads, viz., *kuan-tieh*,²

¹ *yangchien* (洋錢). ² *kuan-tieh* (官帖).

tungyuanpiao,¹ *hsiaoyangpiao*,² *tayangpiao*,³ *chaichuan*,⁴ *huitui**piao*,⁵ and *tiehtzu*.⁶

The origin and history of these notes constitute in themselves a history of the financial trouble of Manchuria, and are interesting in the highest degree to those interested in the economic affairs of the district. But this we can not undertake to give here; we shall simply illustrate some of the principal ones and pass on to another subject.

(a) *Kuantieh*:⁷ *Kuantieh*⁷ is a government note generally issued by institutions affiliated to the provincial governments. Two kinds of this note prevail in Manchuria, Kirin⁸ *kuantieh*⁷ and Amur⁹ *kuantieh*,⁷ which circulate in the respective provinces. These notes were first issued with the best of intention, in the case of the former note it being first issued in 1898 with the purpose of replacing the obnoxious private notes then in circulation in that province. The notes are issued on the cash currency, and the value thereof is given in terms of *tiao*¹⁰ (in the case of the Amur⁹ note the equivalent in silver is also added). During their earlier days, they were readily converted into cash, and naturally maintained a good credit. Later on, however, the finance of the provincial governments fell into such a state of disorder that their conversion was no longer possible, and this was immediately followed by a fall in their value. Every expediency resorted to for the recovery of their value availed but little, and to-day though, in the absence of better money, they circulate largely in the two

1 *tungyuanpiao* (銅元票). 2 *hsiaoyangpiao* (小洋票). 3 *tayangpiao* (大洋票). 4 *chaichuan* (債券). 5 *huitui**piao* (匯兌票). 6 *tiehtzu* (帖子). 7 *Kuantieh* (官帖). 8 Kirin (吉林). 9 Amur (黑龍江). 10 *tiao* (吊).

provinces of Kirin¹ and Amur,² it is only at a large discount that they do so.

(b) *Tungyuanpiao*³: Two kinds also of this note are now in circulation, both being convertible, nominally at least, into copper coins, and the value thereof is represented in "so many of 1 *chien*⁴ copper piece." The one is issued by the Amur² Government Bank, and the other by an office affiliated to the provincial Government of Mukden.⁵ The former has been in use for a considerable time past, but the latter is of quite recent origin, being issued first in January 1919 with the express purpose of relieving the strained financial market occasioned by the non-conversion of the *yangchien*⁶ notes. The conversion of this note is, however, conditional, it being decreed by the Government that "the daily conversion of the note shall be limited to 300,000 pieces, and that per head to 300, and cunning merchants speculating in them shall be punished severely."

(c) *Yangchienpiao*⁷: Nominally the note is convertible into *yangchien*,⁸ and may be classified into two, one convertible into *hsiaoyangchien*,⁹ and the other into *tayangchien*.¹⁰ It is the former, however, that is mostly in circulation, and therefore it is to the former that this description principally applies.

The note is issued by many banks. These are in Mukden⁵ the Three Eastern Provincial Government Bank, Mukden⁵ Industrial Bank, and Mukden⁵ Commercial Bank ;

1 Kirin (吉林). 2 Amur (黑龍江). 3 *Tungyuanpiao* (銅元票). 4 *chien* (錢). 5 Mukden (奉天). 6 *yangchien* (洋錢). 7 *Yangchienpiao* (洋錢票). 8 *yangchien* (洋錢). 9 *hsiaoyangchien* (小洋錢). 10 *tayangchien* (大洋錢).

in Kirin¹ Yung Heng Kuan Yin Chien Bank²; and in Tsitsihar,³ the capital of Amur⁴ Province, the Amur⁴ Government Bank. It is also issued by the branches of the Bank of China, the Bank of Communication, the Territorial Bank, and the Huafu⁵ Industrial Bank. Of these banks, the Mukden⁶ Commercial Bank and the Huafu⁵ Industrial Bank were forbidden to issue further notes in December 1918.

The small *yangchienpiao*⁷ is a note convertible into small *yangchien*⁸ coin, and is to all appearance a modern bank note, bearing a close resemblance to the Japanese note. The value is represented in terms of *yuan*⁹ and *chiao*,¹⁰ and its convertible character is clearly set forth in both Chinese and English. Take for instance a 5 *yuan*⁹ note, the English text runs: "—————Bank promises to pay the Bearer on Demand at its office here Fifty ten cent pieces Local Currency," or sometimes the amount is given as "Five Dollars Local Currency." At present the note is current throughout Manchuria except Kwantung¹¹ Province, but most extensively in Mukden⁶ Province where it forms the principal currency, while in the other provinces, the cash note described above circulates more widely. A great deal of trouble has been caused in Mukden⁶ Province on account of the wanton issue of this note. Its conversion into specie became impossible and this fact led to a great depreciation in its value as compared with that of the actual cash. The situation assumed a most serious aspect in 1913, when the

1 Kirin (吉林). 2 Yung Heng Kuan Yin Chien Bank (永衡官銀錢銀行). 3 Tsitsihar (齊○哈爾). 4 Amur (黑龍江). 5 Huafu (華富). 6 Mukden (奉天). 7 *yangchienpiao* (洋錢票). 8 *yangchien* (洋錢). 9 *yuan* (元). 10 *chiao* (角). 11 Kwantung (關東).

interests of the Japanese residents in Manchuria were gravely affected by it, and the issue of the *tayangchien*¹ note, the *huituipiao*,² and the *chaichuan*,³ which will be described later on, was nothing but a measure to meet the emergency invented by the authorities on this account. The *tayangchien*¹ note was first issued in Mukden⁴ based on an agreement arrived at between the six great banks there, that is, the Three Eastern Provincial Bank, Amur⁵ Government Bank, Industrial Bank, Bank of China, Bank of Communication, and Territorial Bank, which came into force in August, 1917. The agreement ran as follows:

"Both Government and people shall recognize the *tayangchien*¹ standard system. The banks in conference (that is, the six banks above mentioned) shall stop issuing *hsiaoyangchien*⁶ notes the moment this agreement comes into force and also call in and destroy those which have already been issued in exchange for *tayangchien*¹ notes, with the exception of the small notes under 10 *chiao*⁷ for the use of change."

"The exchange ratio of *hsiaoyangchien*⁶ note to the *tayangchien*¹ note to be 10 to 12.

"The conversion of the *tayangchien*¹ note into specie to be unlimited, provided that a limited conversion will be admitted within a period of one year and a half after the enforcement of this agreement."

But such was the discredit of the banks in the eyes of the public that the new note was presented for conversion

1 *tayangchien* (大洋錢). 2 *huituipiao* (滙兌票). 3 *chaichuan* (債券).
4 Mukden (奉天). 5 Amur (黑龍江). 6 *hsiaoyangchien* (小洋錢).
7 *chiao* (角).

as fast as it was issued; and in consequence they were compelled to change the wording, "limited conversion" in the proviso of the last clause of the agreement to the "suspension of conversion." In short, the *tayangchien*¹ note has become as inconvertible as its predecessors. And its exchange for the *hsiaoyangchien*² note has resulted practically in nothing. That there was a great deal of exchange, however, is shown from the fact that at the end of June, 1917, the total issue of the *hsiaoyangchien*² note by the six banks amounted to 15,300,000 Chinese dollars, whereas, at the end of January 1919 they had diminished to 5,800,000, Chinese dollars, the gap being filled by 5,500,000 Chinese dollars of the *tayangchien*¹ note and other miscellaneous notes and bonds. At this moment, the *hsiaoyangchien*² note is at a discount of more than 45 per cent. as compared with the actual cash.

(d) *Huituipiao*³ or Exchange Note: It may appear strange to include in money this note, together with the one following, which we have translated as "bonds," but it is a money in every sense of the word inasmuch as it circulates side by side with other monies, and is handled indiscriminately with the *tayangchien*¹ note. It is, however, greatly different in character from this latter note, since it does not pretend to be convertible but only available as cash when making a remittance, originally not from any point in Manchuria, but, strange as it may seem, from Tientsin⁴ or Peking⁵ to Shanghai.⁶ The English wording, found side by side with the Chinese on its face, says: 'This note is to be

1 *tayangchien* (大洋錢). 2 *hsiaoyangchien* (小洋錢). 3 *Huituipiao* (匯兌票). 4 Tientsin (天津). 5 Peking (北京). 6 Shanghai (上海).

accepted at Tientsin¹ or Peking² in repayment of remittance for the equivalent of Shanghai³ *kweiyuan* taels.⁴ Since January 1919, however, Mukden⁵ has been added to the above two places, but the amount of remittance has been limited to *Yuan*⁶ 40,000 altogether, consisting of 20,000 for Mukden⁵ and 10,000 for each of Peking² and Tientsin.¹ It was first issued by the Three Eastern Provincial Bank of Mukden⁵ based upon the order from the Mukden⁵ Government of January, 1918, but, since April, 1919 the privilege has been extended to the Bank of China and the Bank of Communication, each to the extent of 5 million *yuan*.⁶ The circulation of it seems now quite large, being estimated at somewhere near *Yuan*⁶ 20,000,000.

(e) *Chaichuan*⁷ or Bond: The bond is issued by the Industrial Bank of Mukden,⁵ and the English text printed on it states: "The Bond is not convertible into cash and carries interest at four per cent. per annum." It was allowed to be issued, it is said, to the amount of *Yuan*⁶ 7,000,000, and the amount in circulation at the end of January 1919 was said to be about *Yuan*⁶ 3,000,000. The interest is paid semi-annually in April and November, and when the interest is paid a stamp is affixed to indicate the fact, and the note is handed back to its holder.

(f) *Tiehtzu*⁸ or Private Note: This is a bearer-note issued by private firms and merchants, generally under the supervision of the Chambers of Commerce. The note is legally prohibited, and though the amount has decreased

1 Tientsin (天津). 2 Peking (北京). 3 Shanghai (上海). 4 *Kweiyuan* taels (規銀元). 5 Mukden (奉天). 6 *yuan* (元). 7 *Chaichuan* (債券). 8 *Tiehtzu* (帖子).

considerably of late, its circulation in the province of Mukden¹ alone is estimated at *Yuan*² 15,000,000, and constitutes in certain localities the chief medium of exchange. Nominally it is convertible, but the note of one house is generally paid for in that of another. To do it justice, however, being backed by the whole property of the issuer, upon which the holder of the note has the right of priority over other creditors, the note is at least as good as most bank-notes in Manchuria.

Foreign Monies :—What is termed here “foreign money” includes not only those monies which are actually circulating in foreign countries but also those issued or imported by foreign governments or foreign banks with the purpose of circulating them in China. No small amount of such foreign money is now circulating in China, and though this is something rarely found in a country possessed of full sovereignty, such is the disorder and complexity of the Chinese currency that, unless use is made of these monies, it is almost impossible for foreigners to trade with her. Nor are the Chinese themselves antagonistic to the introduction of these foreign monies, since they know well that they are after all much better and sounder monies than their own.

In Manchuria the influence of foreign money has ever been greater than in the rest of China. Through the two great wars, the Chino-Japanese and the Russo-Japanese, a large amount of Japanese and Russian money was diffused all over the country, and the growing economic interests of the two countries in Manchuria caused them to circulate in ever-increasing amount.

1 Mukden (奉天). 2 *Yuan* (元).

The foreign hard monies now in circulation in Manchuria are Japanese silver yen, Mexican and Hongkong¹ dollars, and Japanese and Russian subsidiary coins, though these last only circulate among their respective nationals. The other coins are used by the natives as freely as their own silver dollars under the generic term of *tayangchien*,² but the amount in circulation of any of these hard monies is very limited.

On the other hand, the foreign bank-notes exert a great influence, and it is mainly through them that the foreign trade of the country is actually carried on. The principal foreign bank-notes circulating in South Manchuria are all Japanese, and these are the Bank of Chosen notes, Yokohama Specie Bank notes, and Bank of Japan notes. Besides, there are still remaining some of the military notes issued by the Japanese military authorities during the Russo-Japanese War. North Manchuria was for a long time under the régime of the Russian note, and in fact near the Russian frontier nothing else was current. But since Russia went to pieces, her money has lost its credit, and in its stead the Bank of Chosen note is steadily extending its influence. These bank-notes circulate in large amount, and within the limits of the leased territories and the railway zones are practically the sole currency. It should be noted, however, that, outside these limited places, their circulation is greatly modified, because, though they are used very extensively and freely for all trading purposes, mutual transactions between the natives are carried on, exclusively as we might say, by native currency. They are, in a word, a trading

1 Hongkong (香港). 2 *tayangchien* (大洋錢).

currency, and not the currency of the people in general. We shall now proceed to describe some of these foreign monies.

(1) Japanese Military Notes: These are relics, as it were, of the Russo-Japanese War, being issued by the Japanese Government during the War for the use of its Manchurian armies. It is a convertible note, payable in Japanese silver yen, and of the six demonstrations of 10, 5, and 1 yen, and 50, 20, and 10 sen. With the progress of the war the amount increased, and in July, 1906, it reached no less than Yen 15,000,000. After the conclusion of the War, the redemption of the note was entrusted to the Yokohama Specie Bank, and recent statistics show that the amount not yet redeemed is only Yen 900,000, while that actually in circulation is estimated to be about Yen 300,000.

(2) Yokohama Specie Bank Silver Note: This is a note issued by the Yokohama Specie Bank and payable in Japanese silver yen. The Yokohama Specie Bank issued its bearer note for the first time in Tientsin,¹ China, in November, 1902, and it was in January the year following that the bank issued the first note in Manchuria through its Newchwang² branch. After the conclusion of the Russo-Japanese War, the Government of Japan gave orders to the bank to redeem the above-mentioned military notes, and, in consideration thereof, conferred on it the privilege of note-issue in Manchuria.

The bank-note is called by the Chinese *yinpiao*³ or *chaopiao*⁴ and is of the four denominations of 1, 5, 10,

¹ Tientsin (天津). ² Newchwang (牛莊). ³ *yinpiao* (銀票). ⁴ *chaopiao* (鈔票).

and 100 yen. It was issued only by the Dairen¹ branch of the bank, and was made payable only at that branch, which practice the bank pursues to this day. The note-issue progressed favourably for the first few years, and at the close of the year 1911 the amount exceeded Yen 7,000,000. But about that time the Chinese enthusiasm for the so-called "rights recovery" was rekindled. The Provincial Bank of Mukden² was established, and it issued bank-notes on small silver dollars (*hsiaoyangchien*³) to compete with the Yokohama Specie Bank note. Nor was the note much in demand among the Japanese residents in Manchuria, who naturally preferred the gold notes which were then beginning to be supplied plentifully in the form of the Bank of Chosen notes. Further, in July, 1913, the Yokohama Specie Bank itself was privileged to issue notes on gold coins or Bank of Japan notes. For these reasons the circulation of Yokohama Specie Bank silver note steadily declined and there was but Yen 2,366,000 in circulation at the end of 1918. The year-end balances of the silver note outstanding since 1907 are as follows:

Year	Amount Yen	Year	Amount Yen
1907	4,905,000	1913	4,049,000
1908	3,999,000	1914	2,984,000
1909	2,856,000	1915	2,257,000
1910	3,604,000	1916	4,121,000
1911	7,198,000	1917	3,074,000
1912	3,439,000	1918	2,366,000

But it would be too hasty to conclude that the fate of the Japanese silver note in Manchuria is doomed. It is still

1 Dairen (大連). 2 Mukden (奉天). 3 *hsiaoyangchien* (小洋錢).

used in the payment of Customs duties, and, what is more, in the Exchanges at Dairen¹ and Changchun² the price of staples is quoted in terms of that note. The fact is, owing to the great increase in the export of Manchurian staples, the demand for the silver notes to-day is unprecedentedly great, but the Yokohama Specie Bank is unable to supply the market with a sufficient amount of them owing to the abnormal price of silver now ruling the world over. This inability gave birth more than once to the question of substituting gold for silver in quoting staples all over Manchuria, but somehow the opposition proved too strong to effect the change. Until this change is effected the silver notes of the Yokohama Specie Bank will see no greater decline for the present.

(3) The Bank of Chosen Note: No foreign money in China has ever succeeded in acquiring so important a position as the one secured in Manchuria by the Bank of Chosen note, which now engages our attention, in so brief a period. Legal tender on the Peninsula of Chosen, the note in early years only circulated in the frontier districts. It pushed its way, however, into the interior without the knowledge of the Bank, we might say, and when the Bank decided upon its policy of expansion into Manchuria in 1913 the note was found circulating all along the Antung-Mukden³ Railway. The establishment of branches by the Bank in various parts of the country enhanced this tendency, and the amount in circulation increased apace. In June, 1916, the Bank began issuing fractional notes to serve as

1 Dairen (大連). 2 Changchun (長春). 3 Antung-Mukden (安東奉天).

subsidiary money to its standard note, and this further widened the use of that note. Finally, in December, 1917, the Government of Japan saw the wisdom of unifying the gold currencies issued by her banks in Manchuria, and the decision being given in favour of the Bank of Chosen note, it was proclaimed the sole Legal tender in Kwantung¹ Province and the South Manchuria Railway Zone. At the same time the Yokohama Specie Bank gold-notes were all transferred to the Bank of Chosen to be withdrawn as speedily as possible in favour of the Bank of Chosen notes. All this took place during the course of only a few years, and, although there is no means to ascertain how much of the Bank of Chosen note is in circulation in Manchuria, owing to the constant inflow and outflow from and to Chosen, it can not be under Yen 30,000,000. The fractional notes in circulation amount at present to Yen 1,700,000.

(4) The Russian Rouble Note: The rouble notes are called by the native *chiangtieh*² or *etieh*,³ and were once by far the most influential foreign money in Manchuria. Once they spread all over Manchuria and circulated as freely in Port Arthur,⁴ Dalny,⁵ and Mukden⁶ as they did in the far north. On the Russian power being confined to the north of Manchuria in consequence of the Russo-Japanese War the sphere of their circulation was also restricted to the north, but, within those limits, practically all transactions, irrespective of nature, were conducted by the notes. They were not merely a trade money but the

¹ Kwantung (關東). ² *chiangtieh* (羌帖). ³ *etieh* (俄帖). ⁴ Port Arthur (旅順). ⁵ Dalny (青泥窪). ⁶ Mukden (奉天).

currency of the country to all intents and purposes. The break-up of Russia and her practical bankruptcy dealt an irreparable blow to this once powerful money, and the Bank of Chosen note is gradually pushing its way in its stead. Yet such is the force of habit that by far the greater part of the North Manchurian trade is as yet carried on in that currency.

CHAPTER X

BANKING

Native banking of old type; Pawn-shops; Native banking of modern type; Japanese banks; Foreign banks; Latest banking development.

Native Banking of Old Type.:—The origin of banking in China is enshrouded in mystery. But it is recorded that in the reign of Emperor Hsien Tsung¹ of the Tung² Dynasty (806-821 A. D.), there prevailed in China a method called *feichien*³ (flying money) by which one could pay in money at a Government office in the capital and receive in exchange therefor a bill which he might present at a local Government office for encashment. This was apparently the origin of bills of exchange in China. Much the same method obtained in Korea under the name of *wei-hwek*,⁴ in which the indebtedness of a local office to the central and *vice-versa* were availed of as a means of remittance.

There are at present three types of native banking in China represented by the *piaochuang*,⁵ *chienchuang*,⁶ and *yinlu*,⁷ and it is interesting to note that these three types had three different origins and developed along lines greatly differing from one another.

1 Hsien Tsung (憲宗). 2 Tung (唐). 3 *feichien* (飛錢). 4 *wei-hwek* (外割). 5 *piaochuang* (票莊). 6 *chienchuang* (錢莊). 7 *yinlu* (銀爐).

About 280 years ago there was established in the province of Shanhsi¹ a private institution with a view to engaging in the remittance of money from one place to another. It being successful, many similar institutions came into being, and all these were called by the general name of Shanhsi Piao Chuang.² The business of these institutions was first confined to the remittance of money, but it was extended, as time went by, to other lines of business, until it came to include nearly all the branches of what we now call banking. They established branches and correspondents at nearly all the important points of the Chinese Empire, including Manchuria, and the influence exercised by them was at one time so great that it seemed to monopolize the financial business of that great Empire. Such was the origin of the once famous Shanhsi Piao Chuang.²

Again, the disorderly state of currency existing in China for many centuries past called into being a horde of money-changers, whose business was to exchange one local coin for another and get profit out of the exchange. The progress of the inter-provincial trade in the sequel of the opening of Shanghai³ made the demand on this business so much the greater, and in consequence those engaged in the business grew in number as well as in wealth. These also began to receive deposits, make advances, issue bills of exchange, and generally carry on banking business. Thus were originated what now go by the name of *chienchuang*⁴ or *chienpu*.⁵

Then there were silversmiths called *yinlu*⁶ engaged in

1 Shanhsi (山西). 2 Shanshi Piao Chuang (山西票莊). 3 Shanghai (上海). 4 *chienchuang* (錢莊). 5 *chienpu* (錢舖). 6 *yinlu* (銀爐).

the making of sycee,¹ and these also developed their business into banks, in so far as they received deposits from customers, and effected monetary settlements between such customers by mere book transfers, thus eliminating the use of actual money. This gave birth to that famous system of the "transfer tael"² in Newchwang.³

Thus the *piaochuang*,⁴ *chienchuang*⁵ or *chienpu*,⁶ and *yinlu*,⁷ which represent the three principal types of native banking in Manchuria as well as elsewhere in China, sprang from three distinct origins, and it is interesting to note that, though their functions are now largely intermingled, each still retains some of its old traits.

The practice of raising money by pawning goods has also been in evidence in China from time immemorial, and, as far back as the period of Tung,⁸ we see restrictions placed on the amount of interest and regulations as to the manner in which interest is added to the principal.

All these bank-like organs exist to-day, though both *piaochuang*⁴ and *yinlu*⁷ have now practically disappeared from Manchuria except in Antung⁹ where, strange to say, both these institutions still exist, though what they now enjoy is but the shadow of their former prosperity. We will not go, therefore, into details of these institutions, but go straight on to a description of the *chienpu*,⁶ which, though shorn of much of its former importance, still plays an active rôle in the Manchurian money market.

The *chienpu*,⁶ also called *chienchuang*⁵ or *yinhao*,¹⁰ is

1 sycee (銀錠). 2 "transfer tael" (過爐銀). 3 Newchwang (牛莊). 4 *piaochuang* (票莊). 5 *chienchuang* (錢莊). 6 *chienpu* (錢舖). 7 *yinlu* (銀爐). 8 Tung (唐). 9 Antung (安東). 10 *yinhao* (銀號).

generally of partnership organization with a capital ranging from *Yuan*¹ 50,000 to 200,000. They exist in almost every town and the small ones, faithful to their tradition, still make money-changing their principal business. But the larger ones receive deposits, make advances, issue bills of exchange, and also the notes which we described as *tiehtzu*² in the previous chapter, and further engage in the sale and purchase of monies. Take a *chienpu*³ in Changchun,⁴ where they prosper most, and examine its working a little. The deposits are divided into the current and fixed. On current accounts no interest is paid, but on fixed deposits interest is paid at the rate of something like 5 per mille monthly, making 6 per cent. per annum. Though no interest is paid on current deposits the accounts amount to a considerable sum with some *chienpu*³ and are made the source of many profitable operations. The payment made through the *chienpu*³ is called *chenma*,⁵ and is effected by the depositors informing his *chienpu*³ of the amount to be paid and the name of the beneficiary. Advances are made on personal credit, with or without the guarantee of a surety and rarely on collateral securities. The term is three months at the longest, ordinarily one month. The rate of interest is, of course, subject to the market rate, but generally 1 per cent. per month. To reliable customers, the *chienpu*³ is always ready to allow an overdraft to a certain extent, charging them more or less high interest. Since advances are as a rule based upon personal credit, they keep more than ordinary vigilance over the financial condition of their customers.

1 *Yuan* (元). 2 *tiehtzu* (帖子). 3 *chienpu* (錢鋪). 4 Changchun (長春). 5 *chenma* (賬碼).

They are rather inclined to refuse advances altogether than to demand collateral securities. The exchange operations of the *chienpu*¹ are confined to the local remittance of money, and are generally on a very small scale. Those on larger scale were formerly conducted by the *piaochuang*² and at present by the banks of modern type.

Pawn-Shops :—Pawn-shops are found in almost every place in Manchuria. The largest is called *tang*,³ the next in size *chihhtien*,⁴ and the smallest *ya*.⁵ These constitute practically the sole monetary organs accessible to farmers, petty merchants, and the lower classes of the people generally. The large pawn-shops, called *tang*,³ are often affiliated to the banks of modern type, and are established sometimes by men of high official position, with a capital upward of *Yuan*⁶ 50,000. Thus the Kung Chi Tang,⁷ a large pawn-shop with offices at Mukden,⁸ Newchwang,⁹ Antung,¹⁰ and Chengchiatun,¹¹ is a subsidiary organ to the Three Eastern Provincial Bank, while the Kirin¹² Government Bank has also a pawn-shop attached to it. Also in Newchwang⁹ there is a pawn-shop called San Hui Tang¹³ largely financed by provincial officials of position.

The rate of interest charged by the pawn-shops ranges from 2 to 3 per cent. a month, while the term is often prolonged to one or two years. The articles pawned consist chiefly of clothing, followed by jewellery. In small pawn-shops called *ya*⁵ the interest is much higher, being 4 to 8 per cent. a month, and the term rarely exceeds four months.

1 *chienpu* (錢鋪). 2 *piaochuang* (票莊). 3 *tang* (當). 4 *chihhtien* (質典). 5 *ya* (押). 6 *Yuan* (元). 7 Kung Chi Tang (公濟當). 8 Mukden (奉天). 9 Newchwang (牛莊). 10 Antung (安東). 11 Chengchiatun (鄭家屯). 12 Kirin (吉林). 13 San Hui Tang (三會當).

The private notes called *tiehtsu*¹ described in the previous chapter are largely issued by pawn-shops, and there are places, such as Chinchou,² where the note-issue is practically limited to them. The private notes, issued by the San Hui Tang³ above referred to, enjoy a credit unsurpassed by any native bank-note.

Native Banking of Modern Type :—Modern banking in Manchuria, so far as our knowledge goes, dates from 1897, when the Russo-Chinese Bank established its branch office in Newchwang.⁴ In all probability the English had a monetary organ to serve their interests, presumably an agency of the Hongkong⁵ Shanghai⁶ Banking Corporation, but we have at hand no data to prove the fact. The Yokohama Specie Bank opened its branch in Newchwang⁴ in 1900. The establishment of modern banks by the natives belongs to the period following the Russo-Japanese War, and the Mukden⁷ Government Bank (now Three Eastern Provincial Bank) which was founded in 1905 may be regarded as the first institution of the type ever established in Manchuria. An institution, which afterwards became the provincial bank of Kirin,⁸ was established at Kirin⁸ as early as 1898, but it is doubtful if it could properly be called a bank of modern type at the time of its establishment, its very capital then being unknown to a certainty.

At the end of May, 1919, there were altogether 22 native banks of the modern type in Manchuria, 10 of which had their head offices in South Manchuria, and 12 in North

1 *tiehtsu* (帖子). 2 Chinchou (錦州). 3 San Hui Tang (三會堂).
4 Newchwang (牛莊). 5 Hongkong (香港). 6 Shanghai (上海).
7 Mukden (奉天). 8 Kirin (吉林).

Manchuria. Besides, there were four banks having head offices in China proper. These 26 banks, with their branches and agencies, cover well-nigh all the important points of Manchuria, and outwardly Manchuria is by no means destitute of modern banking facilities administered by the natives. But a closer observation will reveal the fact that these institutions, modern to all appearance, are, with a few exceptions, not modern in their practice. They publish no statements, so that the public is left in the dark as to their financial standing. Nearly all of these institutions are vested with the power of note-issue, which however has been abused to the last extreme as noted in the previous chapter. Speaking generally, most of these institutions are financially weak, and have no such credit as banking institutions in other countries generally have in their respective communities. But it would be too much to say that they are useless or even harmful in all cases. Poorly backed as they are by specie, with payment often suspended, their notes still circulate, though always at a discount, and are nevertheless indispensable for the trade and commerce of the country. Nor is their superiority to the banks of the old style to be doubted for a moment, for since their appearance all the business hitherto conducted by the old-style bank is gradually passing into their hands. The root of the evils, it appears, is in the chaotic state of currency, and in the lack of strong central authorities to enforce the laws and regulations which are, as we have seen, in the main excellent.

The difference in nature of these native institutions may be inferred to some extent from their names. The

provincial government banks are endowed more or less with the nature of a central bank, the Mukden¹ Industrial Bank and the Territorial Bank, with the nature of an industrial bank, and the Bank of Communication with that of an exchange bank. But these differences are more nominal than real. Owing to the fact that, as noted above, no statement whatever is published by these banks, it is difficult to gauge their condition. One of the Japanese periodicals in Manchuria, the *Mammo-jitsugyo-iho*, has published a table showing the financial status of the native banks in Mukden,¹ as they stood at the end of June, 1918. In the absence of any other information, this is given below in all its incompleteness.

Banks	Deposits			Advances		
	Government	Public	Total	Government	Public	Total
	1,000 Yuan	1,000 Yuan	1,000 Yuan	1,000 Yuan	1,000 Yuan	1,000 Yuan
Three Eastern Provincial Bank	1,395	1,205	2,600	500	4,085	4,585
Mukden ¹ Industrial Bank	?	?	?	1,000	2,000	3,000
Mukden Branch of the Bank of China	1,000	230	1,230	150	500	650
Mukden Branch of Com- munication Bank ...	400	300	700	200	400	600
Mukden Branch of the Territorial Bank ...	?	?	?	100	2,000	2,100
Mukden Branch of the Amur Govern't. Bank	?	?	?	50	50	100
Mukden Commercial Bank	?	500	500	?	1,441	1,441
Total	2,795	2,235	5,030	2,000	10,476	12,476

¹ Mukden (奉天).

A glance at the above table, which, if not correct in details, may at least be taken as indicative of some of the principal features of these banks, will at once show that the deposits are exceedingly small as compared with the advances. This is due to some extent to the conservativeness of the people, but the small credit enjoyed by the banks must largely account for it. Many of the people think it safer to keep their money in their strong box, or to place it in the care of some big merchants or rather of the *Chienpu*.¹ The result is that these banks must seek other resource for their loanable funds. Nor can they depend upon their capital, which is generally very small, and the difficulty of increasing it is easily imagined from the fact that, with the credit of the Bank of China, it was no easy matter for the authorities to find subscribers to its new shares. The two main sources of funds being thus but slightly available, the only course open to them is the note-issue, and with what freedom this course was resorted to by the native banks has been pointed out. Under these circumstances, the growth of the deposit banks, which in other countries are the bones and sinews of their financial structure, is hardly possible in Manchuria.

The abhorrence with which the commercial public regard the contract of loans on collateral securities is another obstacle in the way of the healthy development of banking. Most advances are made on personal credit, or at best on the guarantee of friends of the borrowers. It is clear that no sound banking can exist so long as this custom obtains.

Interest charged by such large banks as the Three

¹ *Chienpu* (錢鋪).

Eastern Provincial Bank, the Bank of China, or the Bank of Communication is said at this moment to range between 12 to 16 per mille monthly (14 to 19% per annum), that by the Territorial Bank from 14 to 20 per mille and that by the Mukden¹ Commercial or Huaifu² Industrial Bank from 14 to 22 per mille. In addition to this, the borrower has to pay extra as commission to the bank's officials—another objectionable feature in native banking—and also to his surety. Thus it will be seen that money costs pretty dear in Manchuria, but there is no wonder in this, when the risk of depending purely on personal credit, by no means always very solid, is taken into consideration.

Deposits are received on current account or for a fixed term. The rate paid on them is said to be 9 per cent. for a fixed deposit, and about $3\frac{1}{2}$ per cent. for current deposit, but actually seems to be considerably lower. They certainly could not afford to pay much on their deposits when they have a more profitable source of funds in issuing notes, for which no adequate reserve is usually kept.

Japanese Banks:—Japanese banking in Manchuria dates from 1900 when in January of that year the Yokohama Specie Bank opened a branch office at Newchwang.³ The following few years saw the bank make a rapid progress, thanks to the constant growth of Japan's trade with Manchuria, to which the bank in its turn made an important contribution. In January, 1903, it issued its first notes in Manchuria. On the outbreak of the Russo-Japanese War, the bank was compelled to close its Newchwang³ branch, but when the port was occupied by the Japanese the follow-

1 Mukden (奉天). 2 Huaifu (華富). 3 Newchwang (牛莊).

ing year, not only was the branch re-opened, but new offices were established at Dairen,¹ Liaoyang,² Mukden,³ and Tiehling,⁴ as these places were occupied one after the other by the Japanese troops, and these were made the so-called cash offices of the Manchurian Armies of Japan. After the War the bank was entrusted by the Japanese Government with the task of withdrawing its military notes diffused during the War, and also of generally assisting in the promotion of the trade between that country and Manchuria. More branches were subsequently established in Changchun,⁵ Harbin, and Kaiyuan,⁶ and with its general office, first at Newchwang⁷ and then at Dairen,¹ the bank came to enjoy much the same position as the one once enjoyed by the Dai Ichi Ginko in Korea. It is indeed a strange coincidence that both these banks were destined at a later period to transfer much of the business in their respective fields to the one and the same bank, the Bank of Chosen.

But the Yokohama Specie Bank, whose leading business was in the line of exchange, fell in many instances short of the demand made on it by the Japanese public in Manchuria, who required long term loans in order to finance their enterprises, and these the bank could not afford to grant from its very nature. But the drawbacks were remedied to some extent through the Government measure, by which the Bank of Japan was called upon to make to the bank a low interest loan of Yen 3,000,000, later increased to Yen 5,000,000, to be used for these specific purposes.

1 Dairen (大連). 2 Liaoyang (遼陽). 3 Mukden (奉天). 4 Tiehling (鐵嶺). 5 Changchun (長春). 6 Kaiyuan (開原). 7 Newchwang (牛莊)

In 1906 a Chino-Japanese Joint Stock Bank called Shoryu Ginko, was established with a capital of 300,000 silver yen at Newchwang¹ with a branch at Dairen.² The result of its business in its initial stage was anything but satisfactory. It was in consequence completely reorganized in 1911, its capital being increased to 700,000 gold yen and 300,000 silver yen all paid up, while its head office was removed to Dairen.³ After that the progress of the bank was phenomenal. It is now the largest bank having its head office in Manchuria and managed by Japanese. To cope with the expansion of its business the bank's capital was increased to Yen 3,000,000 in 1915.

Subsequent to the establishment of the Shoryu Bank a large number of Japanese and semi-Japanese banks were established. But the most significant event in the financial history of Manchuria of recent days is the appearance of the Bank of Chosen in Manchuria. Of the progress of this important institution, details will be given later on, but to summarize its career, this peninsular Bank has had a branch in Antung³ ever since its establishment, transferred to it by its predecessor, the Dai Ichi Ginko, but for various reasons the Bank remained inert so far as its Manchurian business was concerned. Meanwhile the bridge over the Yalu⁴ was completed, the reduction by one-third of the regular tariff on land trade came into force, and all this resulted in a great development of trade between that Peninsula and Manchuria. Moreover, such was the trade condition of the Peninsula at that time that, unless the bank extended its

1 Newchwang (牛莊). 2 Dairen (大連). 3 Antung (安東). 4 Yalu (鴨綠江).

sphere of business to adjacent countries, it was difficult for it to maintain its specie reserve. Prompted by these various reasons the Bank of Chosen appeared in the Manchurian financial field, and, without being aggressive, so great was the demand made on it that its business was soon found expanding in all directions, outstripping many older institutions, not excepting even the Yokohama Specie Bank. There is little wonder in this, however, for the Bank of Chosen partaking of the character of a colonial bank is decidedly the better fitted of the two, for the services required in Manchuria.

Finally, in December, 1917, the various privileges hitherto enjoyed by the Yokohama Specie Bank were made over to the Bank, making the latter the central bank of Japanese Manchuria.

Another Korean institution entered Manchuria in 1917. That was the Oriental Development Company. Originally established to engage in Chosen in the colonization and exploitation of the country, the company was later enabled by a revision of its laws to extend its work outside the Peninsula. It established branches in Mukden¹ and Dairen² in October, 1917, took over the business relative to the industrial funds elsewhere explained from the Yokohama Specie Bank, and made itself the chief supplier of industrial credit in Manchuria. The chief feature of the banking department of this company is in the great variety of the securities upon which loans are made, including mining rights, lands, houses, factories, forests, railroads, etc., either direct or through other institutions. Its activity in

¹ Mukden (奉天). ² Dairen (大連).

Manchuria is best shown by the fact that during the period of about one year ending February, 1919, the total amount invested by it aggregated no less than Yen 11,300,000. The company has further acquired interest in some 18 companies, mostly through subscription to their shares. The Tosho Jitsugyo Kaisha,¹ capital Yen 3,000,000, is a company of its creation, and closely affiliated to it in business. The principal business of this company consists in loans on products, estates, etc.; buying and selling of products on its own account or on account of third parties; trust and guarantee business; subscription to shares and debentures; etc.

On the whole, Manchuria, as it now is, is largely financed by its Japanese institutions. It is hoped that the native banks will be strengthened and improved, so that they, too, may play their part in the economic development of their country.

JAPANESE BANKS IN MANCHURIA

(Conditions as on May 31, 1919)

Name of Bank	Date of Establishment	Authorized Capital Yen	Paid up Capital Yen	Location of Head Office	No. of Branch Offices in Manchuria
Bank of Chosen.	Oct. 1909	40,000,000	30,000,000	Seoul ²	18
Yokohama Specie Bank	Feb. 1880	48,000,000	43,000,000	Yokohama	6
Dairen ³ Commercial Bank	Nov. 1918	2,000,000	500,000	Dairen ³	—
Dairen Bank	Dec. 1912	1,000,000	575,000	Dairen	1
Sung Hua ⁴ Bank	May 1914	1,000,000	362,500	Harbin	—
Educational Savings Bank	Sept. 1900	500,000	200,000	Tokyo	1

1 Tosho Jitsugyo Kaisha (東京實業會社). 2 Seoul (京城). 3 Dairen (大連). 4 Sung Hua (松花).

Name of Bank	Date of Establishment	Authorized Capital Yen	Paid-up Capital Yen	Location of Head Office	No. of Branch Office in Manchuria
Changchun ¹ Bank	Jan. 1918	350,000	175,000	Changchun ¹	2
Trade Bank	...Aug. 1913	200,000	50,000	Tiehling ²	—
Changchun ¹ Business Bank	...Jan. 1918	200,000	100,000	Changchun ¹	—
Wafangtien ³ Bank	...Feb. 1918	100,000	50,000	Wafangtien ³	—
Szupingchieh ⁴ Bank	...Feb. 1918	70,000	17,500	Szupingchieh ⁴	—
Tiehling ² Bank	...Mar. 1908	50,000	31,250	Tiehling ²	—
Commercial & Industrial Bank	...Apr. 1913	50,000	25,000	Liaoyang ⁵	1

CHINO-JAPANESE BANKS IN MANCHURIA.

(Conditions as on May 31, 1919)

Name of Bank	Date of Establishment	Authorized Capital Yen	Paid up Capital Yen	Location of Head Office	No. of Branch Offices in Manchuria
Syoryu Bank	...July 1906	3,000,000	3,000,000	Dairen ⁶	9
Manchurian Commercial Bank	...May 1911	1,400,000	425,000	Antung ⁷	2
Lungkow ⁸ Bank	...May 1913	1,000,000	750,000	Dairen ⁶	—
Liaoyang ⁵ Bank	...June 1916	1,000,000	295,000	Dairen ⁶	5
Mukden ⁹ Bank	...Dec. 1918	1,000,000	250,000	Mukden ⁹	—
Antung ⁷ Bank	...May 1911	500,000	300,000	Antung ⁷	4
Tiehling ² Chino-Japanese Bank	May 1918	300,000	75,000	Tiehling ²	—
Port Arthur ¹⁰ Bank	...May 1918	150,000	37,500	Port Arthur ¹⁰	—
Pitzuwo ¹¹ Bank	...Jan. 1917	100,000	50,000	Pitzuwo ¹¹	—
Fanchiatun ¹² Bank	...Oct. 1917	100,000	50,000	Fanchiatun ¹²	—

1 Changchun (長春). 2 Tiehling (鉄嶺). 3 Wafangtien (瓦房店).
 4 Szupingchieh (四平街). 5 Liaoyang (遼陽). 6 Dairen (大連). 7 Antung (安東). 8 Lungkow (龍口). 9 Mukden (奉天). 10 Port Arthur (旅順). 11 Pitzuwo (貔子窩). 12 Fanchiatun (范家屯).

Foreign Banks :—There are three foreign banks doing business in Manchuria, viz., the Russo-Asiatic Bank, the Hongkong¹ and Shanghai² Banking Corporation, and the Chartered Bank of China, India and Australia. The Russo-Asiatic Bank was the first of the foreign banking institutions to establish a branch in Manchuria, its Newchwang³ office having opened to business in 1897. It now retains but a shadow of its former prosperity, yet it still has branches at Newchwang,³ Dairen,⁴ Changchun,⁵ Tiehling,⁶ Kirin,⁷ Harbin, and Tsitsihar,⁸ and exercises no small influence in its own sphere. The Hongkong¹ and Shanghai² Banking Corporation has agencies in Dairen,⁴ Newchwang,³ and Harbin, and the Chartered Bank of China, India and Australia only in Newchwang.³ These English banks confine their business chiefly to operations in exchange and, though important, their influence does not appear to be so great as in more southern provinces of China. Besides, there are two Russian local banks both having their offices only in Harbin and called the First Loan Bank and the Second Loan Bank. They were established in 1908 and 1910, and have capital of 3,090,000 and 1,080,000 roubles respectively.

Latest Banking Development :—The Semi-Annual Report of the Bank of Chosen ending December 31, 1919 has the following :

“To describe the recent banking conditions in Manchuria, there are in Manchuria at present 75 banking offices, inclusive of both head and branch offices, managed by

1 Hongkong (香港). 2 Shanghai (上海). 3 Newchwang (牛莊).
4 Dairen (大連). 5 Changchun (長春). 6 Tiehling (鐵嶺). 7 Kirin (吉林). 8 Tsitsihar (齊齊哈爾).

Japanese (including 18 of our offices). At the end of November, 1919, the deposits on gold account with these banking offices stood at Yen 91,000,000 and advances, also in gold, at Yen 168,000,000. A comparison of these figures with those of a year ago will show that the deposits have increased by 50 per cent. and advances by 90 per cent. On the same date the balance in silver with them showed Yen 9,900,000 of deposits and Yen 78,600,000 of advances. On the other hand, clearings by the Mukden¹ clearing house (where gold only is handled) ranged between Yen 7,000,000 and Yen 8,000,000 per month, while that by Dairen² clearing house reached Yen 200,000,000 on gold account and over Yen 30,000,000 on that in silver. Thus the Dairen² clearing house now occupies a place second only to those in Tokyo, Osaka, Kobe, and Yokohama. The great demand for funds in Manchuria will be evident from this fact alone. The establishment of new local banks and the extension of existing ones taking place in Manchuria in recent years, is but a natural sequence of this demand, and we doubt not that the healthy development of these institutions will greatly contribute to the economic welfare of Manchuria."

1 Mukden (奉天). 2 Dairen (大連).

CHAPTER XI

THE BANK OF CHOSEN IN MANCHURIA

Summary of the growth of the Bank of Chosen; Early development of the Bank in Manchuria; Change in status; Expansion of Manchurian business of the Bank—(a) deposits, (b) advances, and (c) exchange; The Bank of Chosen and gold currency; Half-yearly Balance Sheets of the Bank of Chosen for the past ten years compared.

*Summary of the Growth of the Bank of Chosen:—*Of the history of the Bank of Chosen a fairly detailed account has been given in our work on its homeland, Chosen, so we shall not trouble our readers with a repetition of it in this work. For the benefit of those, however, to whom the other work may not be available we think it advisable that a brief summary of it should be given here.

The Bank of Korea, as the Bank was formerly called, was established in November, 1909, as the central bank of Korea, when that country was still independent, though already a protectorate of Japan. It started business with its head office in Seoul, and a subscribed capital of Yen 10,000,000, of which only a quarter was paid up. Its business was then practically confined to the Peninsula, the only one branch in Manchuria, that in Antung,¹ doing but little business in that country and that rather for Korea than for Manchuria.

In 1910 Korea was annexed by Japan but this did not produce any substantial change in the status of the Bank,

¹ Antung (安東).

the change in name from the Bank of Korea to the Bank of Chosen being practically all that then took place.

During the first few years of its establishment the rôle of the Bank in the Peninsula was far from being an enviable one. The Korea at the time of the Bank's foundation was vastly different from the Korea of to-day. Though the reform work initiated by Japan had been in progress for many years, it was as yet far from being complete. To say the least, the economic basis of the country was still very weak. The currency system was unified indeed, but there was still left a large amount of the old coinage in circulation to the detriment of the working of the new system. Fast as was the industrial development, it remained to be seen whether it was a sound one or not. The public credit was unstable and easily shaken, while elements to disturb it, such as the occasional business depressions, tightness of money, and prevalence of speculative manias, were far from being few. It was also about this time that the annual import-excess was assuming an alarming tendency, making it extremely difficult for a central bank to maintain its specie reserve at the required ratio. Nor was there much to indicate its future importance. Even the very *raison d'être* of its existence was questioned and some declared the advisability of having it incorporated with the Bank of Japan. A very prominent citizen of Seoul was of this opinion, and expounded his views very eloquently in a pamphlet which he published at his own expense. This same institution has developed in ten years into the Bank of Chosen of to-day—a large and prosperous institution, and, far from being superfluous, with a long record of useful

service both to the State and to the public. A comparison of the capacity of the Bank of those days and of to-day will be interesting, now that the Bank is celebrating its decennial and for that purpose the following table is given :

	Subscribed Capital	Paid up Capital	Reserve Funds	Branches in Chosen	Branches in Other Countries	Officials and Ser- vants
	Yen	Yen	Yen			
1909 ...	10,000,000	2,500,000	2,650	12	1	340
1910 ...	"	"	"	12	2	394
1911 ...	"	5,000,000	16,150	12	2	447
1912 ...	"	7,500,000	57,350	12	2	499
1913 ...	"	"	134,000	12	6	566
1914 ...	"	10,000,000	240,000	12	7	576
1915 ...	"	"	378,000	12	8	635
1916 ...	"	"	518,000	12	12	724
1917 ...	20,000,000	15,000,000	1,683,000	12	16	819
1918 ...	40,000,000	25,000,000	2,333,000	10	25	1,146
1919 ...	"	*40,000,000	4,820,000	10	28	1,411

Thus it will be seen that during the past decade the subscribed capital has increased fourfold, the paid up sixteenfold, the reserve fund from nil to five million, and number of officials and servants four and a half times, while as regards the number of branches outside the Peninsula it has increased from one to twenty-eight. A striking exception to this general expansion is the number of its Chosen branches, which has decreased from twelve to ten, but, in this case, shrinkage is more welcome than expansion, since it shows that the Bank, owing to the development of ordinary banks, has been able to shift some of its local

* The capital of the Bank actually stands at Yen 80,000,000, being doubled by the resolution passed at the General Meeting of Shareholders held in Feb., 1920, when the book was being printed.

business to the shoulders of local bankers, drawing so much the nearer to the ideal which it has set for itself in Chosen—to become a central bank as the term is understood in most advanced countries, confining itself largely to the rediscounting of bankers' bills and other business properly belonging to a central bank.

Thus the business of the Bank, which was of a purely domestic nature in its early days, has assumed an international character. It was first extended to Japan and Manchuria and then to China and Eastern Siberia. Its relations with the world at large have also become closer, and in 1919 an agency in the Bank's name was opened in New York with a view to further facilitating its business in America, and it is expected that it will not be long before the Bank is represented by its branch in London also.

As to the expansion of the volume of its business some idea may be obtained from the following table in which Deposits, Advances, and Note Issue, as they appear in the Annual Statements of the Bank for the past ten years, are given :

Year	Deposits		Advances		Note Issue	
	Yen	Index No.	Yen	Index No.	Yen	Index No.
1909 Dec.	7,631,641	100	19,624,627	100	13,439,700	100
1910 "	5,960,650	78	22,193,052	113	20,163,900	150
1911 "	6,978,281	91	21,897,610	112	25,006,540	186
1912 "	14,169,878	166	32,506,391	166	25,550,400	190
1913 "	20,801,925	273	37,532,657	191	25,693,260	191
1914 "	17,598,504	231	37,076,012	189	21,850,370	163
1915 "	18,588,601	244	42,962,501	218	34,387,520	256
1916 "	33,033,410	433	59,487,286	303	46,627,080	347
1917 "	88,413,372	1,159	113,335,499	578	67,364,949	501
1918 "	218,960,149	2,869	254,290,517	1,296	115,523,670	860
1919 "	194,300,800	2,546	398,585,782	2,031	163,600,056	1,217

The table shows that the deposits have increased during the past ten years from Yen 7,631,641 to Yen 194,300,800, or about 25 times, advances from Yen 19,624,627 to Yen 398,586,782 or about 20 times, while the note issue has expanded from Yen 13,439,700 to 163,609,053 or about 12 times.

Many causes have contributed to this rather remarkable expansion of the business of the Bank. The development of Chosen, its homeland, is one; the favourable turn of the times, brought about chiefly by the World War, is another. But, with all this, the progress of the Bank would hardly be half so great were it not for the extension of the sphere of its activity to the surrounding countries, of which Manchuria is the principal one.

Early Development of the Bank in Manchuria:— Complaints have often been heard among the commercial public of Chosen that the Bank of Chosen devotes too much of its energy to its Manchurian business, so much so that its own home, Chosen, is neglected. The charge is, of course, not true. Such misunderstanding is however not altogether unreasonable, when the fact is taken into consideration that Manchuria has more of its branches than Chosen, there being 18 branches against 10 branches in the latter country. But then there is a great difference between the two in the size of the field, as well as in the wealth of the natural resources. When these are considered the difference may be said to be not quite large enough. In many respects, indeed, the growth of the Bank in Manchuria has been more natural than it was in the Peninsula, for in the latter country with

its meagre resources the Bank had often to create the demand for its own money, while in Manchuria the demand was always present, and the Bank in most cases had simply to follow it.

It is, however, interesting to note that, in extending its business to Manchuria, profit was only a secondary consideration on the part of the Bank, the first object being to protect its specie reserve which was in danger at the time of constant diminution through the annual import-excess from which Chosen was suffering. Failing to see equilibrium of trade established in Chosen, it desired to see it maintained in its field taken as a whole by widening it abroad. To put it in clearer terms, the Bank wanted to make good what Chosen was losing on account of its import-excess with that which Manchuria was gaining by its large exports. To buy Manchurian export bills and thereby create a balance abroad to meet the ever-increasing obligation of Chosen was the first object of its Manchurian expansion. But this was not the only reason. Manchuria had ever been a tempting field for the Bank but then the trade of Chosen with the country was anything but such as to justify its forward policy. A great change had, however, taken place in that relation during the time that had elapsed between this and that time. In the first place, the Yalu¹ Bridge had been completed, and with it came into force the reduction by one-third of the regular tariff on the overland trade, which could not but result in stimulating Chosen-Manchuria trade. With the railway bringing the two countries closer, each country found out that there were a great many things

¹ Yalu (鴨綠江).

which it could import from or export to, the other with profit, and all this resulted in a great expansion of their trade. Nor was the Bank without its own reason, besides the protection of its specie reserve above referred to. In Antung,¹ on the Manchurian side of the Yalu,² the Bank had maintained a branch ever since its foundation, it being transferred from the Dai Ichi Ginko. This branch had, however, been more for the Bank's Korean business than for Manchuria's, and so its activity went little beyond the bounds of that prosperous, yet then small town. But there were the Bank's notes, which, almost without the knowledge of the Bank, had been silently pushing their way farther into the Continent, and were seen circulating all along the Antung-Mukden³ Railway. These notes were, as it were, beckoning to the Bank to follow them up with branches. All this seemed to indicate that the time was ripe for the advancement northward of the Bank. The first step taken was the establishment of a branch office in Mukden,⁴ the political centre of South Manchuria, in July, 1913, closely followed by that of two other branches in Dairen⁵ and Changchun.⁶ Shortly after an agreement was concluded between Japan and China with regard to the construction of a line to penetrate into Mongolia, and as the town of Szupingchieh⁷ was to be its starting point, the Bank established a branch there, and this was followed by the foundation of still another branch at Kaiyuan,⁸ a local distributing centre for Manchurian staples. Meanwhile the trade with

1 Antung (安東). 2 Yalu (鴨綠江). 3 Antung-Mukden (安東奉天). 4 Mukden (奉天). 5 Dairen (大連). 6 Changchun (長春). 7 Szupingchieh (四平街). 8 Kaiyuan (開原).

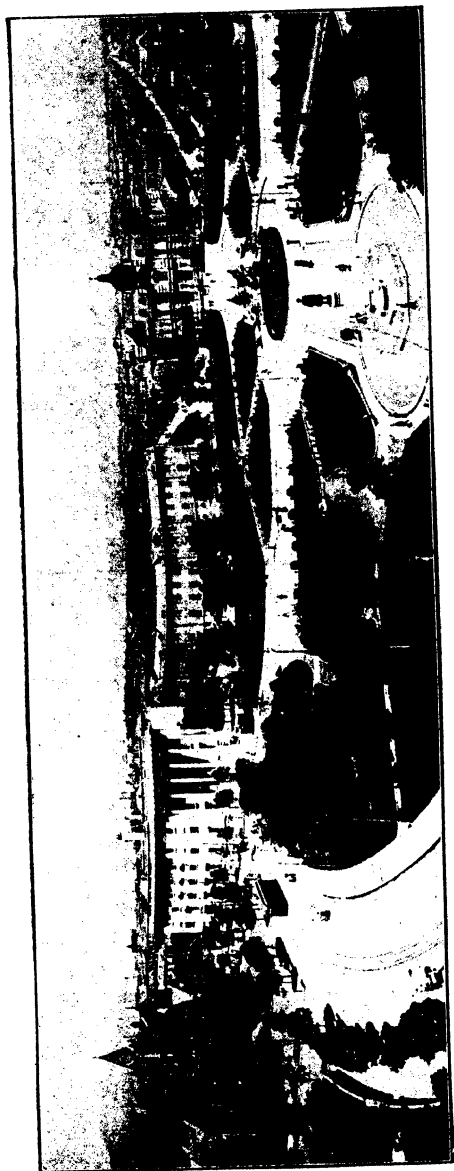
Russia was steadily growing, and, for the purpose of administering to the requirements arising therefrom, the Bank established a branch at Harbin, and a sub-branch at Fuchiatien,¹ both of which towns have been mentioned repeatedly in connection with the economic progress of North Manchuria. Subsequently more branches were established at Newchwang,² also called Yingkow,³ at Kirin,⁴ the capital of Kirin⁴ Province, and at Lungchingtsun,⁵ a sort of post-town on the route between North Chosen and Manchuria. In December, 1917, the above-mentioned Mongolia Line was completed and opened to traffic as far as Chenchiatun,⁶ the first important town in Inner Mongolia on that line. The Bank therefore lost no time in establishing a branch there, and with this made its first step into Mongolia. On the Bank taking over the treasury business hitherto conducted by the Yokohama Specie Bank in Japanese Manchuria in 1917, the latter's branches at Port Arthur,⁷ Liaoyang,⁸ Tiehling,⁹ and Antung¹⁰ were made over to the Bank. Thus the Bank of Chosen, which had up to 1913 only one branch in the whole of Manchuria, was represented by its branch in every important place in it by the end of 1918. The Manchurian branches of the Bank of Chosen, with the date of their opening, are tabulated as follows :

1 Fuchiatien (傅家甸). 2 Newchwang (牛莊). 3 Yingkow (營口).
4 Kirin (吉林). 5 Lungchingtsun (龍井村). 6 Chenchiatun (鄭家屯).
7 Port Arthur (旅順). 8 Liaoyang (遼陽). 9 Tiehling (鐵嶺).
10 Antung (安東).

Location	Established
Antung ¹	November 24, 1909
Mukden ²	July 15, 1913
Dairen ³	August 20, "
Changchun ⁴	September 5, "
Szupingchieh ⁵	February 14, 1914
Kaiyuan ⁶	September 15, 1915
Harbin	July 15, 1916
Yingkow ⁷ or Newchwang ³	September 15, "
Fuchiatién ⁹	December 1, "
Lungchingsun ¹⁰	March 22, 1917
Kirin ¹¹	June 1, "
New Town, Mukden ²	November 1, "
Port Arthur ¹³	January 1, 1918
Liaoyang ¹³	" "
Tiehling ¹⁴	" "
Chengchiatun ¹⁵	March 1, "
Manchouli ¹⁶	September 22, "
Tsitsihar ¹⁷	November 15, "

Change in Status:—It has been pointed out that the Bank of Chosen was vested on its foundation with a double character, that of a central, and that of an ordinary commercial bank, and it was the Bank of Chosen as an ordinary commercial bank that expanded to Manchuria. In that country it had no privileges, and its status there was in a line with other foreign banks. Its notes, though circulating in large numbers and exceedingly popular, owed their circulation wholly to the credit of the Bank itself and not to

1 Antung (安東). 2 Mukden (奉天). 3 Dairen (大連). 4 Changchun (長春). 5 Szupingchieh (四平街). 6 Kaiyuan (開原). 7 Yingkow (營口). 8 Newchwang (牛莊). 9 Fuchiatién (傅家甸). 10 Lungchingsun (龍井村). 11 Kirin (吉林). 12 Port Arthur (旅順). 13 Liaoyang (遼河). 14 Tiehling (鐵嶺). 15 Chengchiatun (鄭家屯). 16 Manchouli (滿洲里). 17 Tsitsihar (齊齊哈爾).



Bird's eye View of the City of Dairen (大連)
The large white building to the left is the new home of the Bank of Chosen in Dairen

any legal foundation, while the gold notes issued by the Yokohama Specie Bank with its smaller circulation enjoyed the privilege of being the legal tender in Kwantung¹ Province and the South Manchuria Railway Zone. It was also by the Yokohama Specie Bank that the national treasury business in Japanese Manchuria was conducted. Naturally one was induced to ask whether it was conducive to the interests of the Japanese community in Manchuria to have two kinds of gold note; which were the same in every respect though issuing from different sources in so small a place as Kwantung¹ Province and the South Manchuria Railway Zone, which is still smaller. The Government had also seen the wisdom of unifying the gold note of Manchuria, but the question was, by which note was it to be unified? In this the Bank of Chosen had many advantages over the Yokohama Specie Bank. In the first place, the Bank of Chosen is a bank of issue in nature, and it had had a long experience in note-issue, which it was largely through its efforts that the currency reform of Chosen had been so successfully accomplished. The Yokohama Specie Bank, on the other hand, is an exchange bank in character, and it was only as a temporary expedient that it was endowed with the privilege of issuing the legal tender money. Secondly, the Yokohama Specie Bank, though earlier in the date of its entry into Manchuria, had issued nothing but silver notes until after the Bank of Chosen notes had acquired a considerable influence in that country, and in consequence the circulation of its gold note had never been very large. Thirdly, Chosen and Manchuria are so

¹ Kwantung (關東).

closely related, both geographically and economically, that there could be no doubt that the same money circulating in both would prove to their mutual benefit. Moreover, the Bank of Chosen had always been a staunch believer in gold currency, and it was but natural that, if the monetary system of Japanese Manchuria was to be unified by gold, it should be done so by its notes. Probably for these reasons the decision was given in favour of the Bank of Chosen. The Imperial Decree of November 27, 1917, abolished the privilege of the Yokohama Specie Bank and conferred it upon the Bank, thus making the Bank of Chosen notes, on and after the 1st of December, 1917, the sole legal tender throughout the length and breadth of Kwantung¹ Province and the South Manchuria Railway Zone. In addition to this, on December 31, 1917, the Treasury Business of the Japanese Government in Manchuria was also transferred to the Bank. It is thus that the Bank of Chosen which started its career in Manchuria as a mere commercial bank, was turned into the central bank of Japanese Manchuria.

Expansion of Manchurian Business of the Bank :—

What we have said of Chosen under a similar heading in our work on Chosen may be applied to Manchuria, and even perhaps more strongly. We have enumerated three principal facts that have largely contributed to the progress of the Bank in Chosen in general, which, when applied to Manchuria, become thus : (1) The development of Manchuria itself ; (2) Extension of the sphere of activity ; (3) the favourable turn of the times.

As to the wonderful development of Manchuria in recent times, this whole volume bears witness to it, and of

course no comment is necessary, while as regards to the extension of its sphere of business the fact, noted just a page or two back, that the Bank, which had up to 1913 only one branch in the whole of Manchuria, was in possession of 18 branches at the end of 1918 may suffice to prove it. The third point, the favourable turn of the times, has also been explained. The Great European War was conducive to the economic prosperity of the whole East, which, in turn, came home to the Bank to expand its business.

Even the disasters that fell on Siberia and North Manchuria in the sequel of Russia's dismembering were not altogether unfortunate for the Bank, for, by the collapse of Russian banks more business was brought to it, though the sacrifice paid by the Bank on that account was not very small. Let us now examine the principal items of the Bank's accounts and trace their development.

(a) Deposits: The circumstances that make it extremely difficult for a Manchurian bank to maintain respectable figures in their deposit accounts have been explained. Nevertheless the progress of the Bank of Chosen along this line was by no means unsatisfactory, due partly to the fact that a large percentage of its customers are Japanese and partly to the high credit in which it is held by the native public. The fact is shown in the following table :

Year	Official Deposits	Fixed Deposits	Current Deposits	Other Deposits	Total	Index No.
	Yen	Yen	Yen	Yen	Yen	
1909 Dec. 31...	—	21,909	209,296	80,134	311,339	100
1910 June 30...36,139		20,236	201,948	135,474	393,797	126
„ Dec. 31...52,691		23,797	274,814	91,212	442,514	142
1911 June 30...68,414		24,184	192,084	100,918	385,600	124

Year	Official Deposits	Fixed Deposits	Current Deposits	Other Deposits	Total	Index No.
	Yen	Yen	Yen	Yen	Yen	
1911 Dec. 31	68,149	14,324	223,334	165,421	471,228	149
1912 June 30	79,591	217,811	273,848	97,202	668,452	214
„ Dec. 31	58,157	523,801	117,191	98,786	797,935	257
1913 June 30	72,508	380,072	459,283	82,875	994,738	319
„ Dec. 31	45,590	335,428	223,961	144,174	749,153	241
1914 June 30	70,689	307,015	363,138	249,846	990,688	318
„ Dec. 31	41,723	171,491	527,836	322,574	1,063,624	341
1915 June 30	45,275	486,290	1,217,177	306,398	2,055,140	660
„ Dec. 31	39,680	208,411	1,503,242	327,304	2,084,637	663
1916 June 30	26,157	249,172	3,437,441	731,673	4,444,443	1,428
„ Dec. 31	22,819	616,214	5,686,895	2,781,385	9,107,313	2,925
1917 June 30	33,209	979,874	6,653,826	5,598,717	13,265,626	4,268
„ Dec. 31	38,263	1,218,676	7,726,511	3,354,892	12,338,342	3,963
1918 June 30	47,094	5,327,731	12,435,312	4,844,966	22,655,103	7,274
„ Dec. 31	33,603	6,576,775	17,042,320	7,916,371	31,569,069	10,140
1919 June 30	49,017	8,950,375	18,363,911	23,310,138	51,173,441	16,437
„ Dec. 31	33,028	8,022,471	26,598,737	9,901,239	44,555,475	14,311

(b) Advances: For the first year or two the Bank, faithful to its original object, devoted itself chiefly to the discounting of export bills, thereby to create credit abroad wherewith to pay out the import-excess of its home country, Chosen. Naturally its advances were chiefly made against beans and other export articles. But this necessity was soon gone, for the outbreak of the European War and the consequent prosperity in its export trade adjusted the trade condition of the Peninsula by itself, so much so that at one time even some export-excess was witnessed in its trade returns. Freed from this handicap the Bank now undertook to finance import as well as export, and, needless to say, this greatly increased its advances. Thus, at the close of 1915, when the European War had just begun to exercise

a favourable influence in the trade, advances against cotton fabrics and yarns, the chief imports of Manchuria, stood at only Yen 271,525 against Yen 8,437,575 for beans and their products, whereas, in 1919, the former increased to Yen 52,875,985, while the latter expanded to Yen 138,934,760, showing that the advances on imports are increasing fast.

Further, the increase of trade with Japan and other gold countries meant increase in the demand for gold funds, and this also augmented the advances of the Bank, which is their chief supplier in Manchuria. This wonderful increase in all the lines of the Bank's advances is substantiated by the following figures :

Year	Time Loans	Over- drafts	Bills Dis- counted, etc.	Total	Index No.
	Yen	Yen	Yen	Yen	
1909 Dec. 31...	9,751	40,918	76,509	127,178	100
1910 June 30...	28,331	23,887	129,064	181,232	143
" Dec. 31...	35,833	37,105	61,354	134,293	105
1911 June 30...	33,522	28,871	117,086	179,479	141
" Dec. 31...	18,085	23,922	84,567	126,574	99
1912 June 30...	46,042	7,222	164,018	217,282	171
" Dec. 31...	105,721	26,651	144,832	277,214	218
1913 June 30...	61,163	58,224	451,332	570,719	448
" Dec. 31...	508,725	489,998	1,551,806	2,550,529	2,005
1914 June 30...	433,657	434,011	951,439	1,819,113	1,430
" Dec. 31...	421,726	1,169,565	1,716,710	3,308,003	2,601
1915 June 30...	394,008	980,714	1,810,819	3,185,541	2,504
" Dec. 31...	587,702	1,250,828	1,843,277	3,681,807	2,895
1916 June 30...	201,637	699,090	2,801,221	3,701,998	2,911
" Dec. 31...	2,126,869	2,008,946	8,095,184	12,230,999	9,579
1917 June 30...	726,273	2,152,198	8,556,306	11,434,777	8,990
" Dec. 31...	2,144,963	6,108,038	13,237,272	21,484,273	16,893
1918 June 30...	2,932,450	7,547,801	17,789,174	28,269,425	22,259
" Dec. 31...	8,959,949	28,066,500	32,830,482	69,856,931	55,005
1919 June 30...	3,931,662	19,380,945	62,852,007	86,164,614	67,846
" Dec. 31...	6,725,460	23,491,513	84,772,468	114,989,441	90,543

The following table will also be interesting in that it shows to what extent the Bank has contributed to the trade in beans and their products, the chief export articles, and to that in clothing materials, the chief import articles, by supplying credit against them.

Year		Beans	Bean Cake	Bean Oil	Cotton Fabrics	Cotton Yarns
		Yen	Yen	Yen	Yen	Yen
1912	...	234,891	—	—	86,731	20,198
1913	...	1,807,849	—	—	280,950	15,230
1914	...	4,330,913	—	—	692,674	45,592
1915	...	8,437,574	—	—	201,206	70,319
1916	...	7,726,430	5,971,006	1,892,564	668,950	85,343
1917	...	12,333,030	6,924,074	1,061,352	5,192,587	566,572
1918	...	28,051,085	15,758,200	6,159,094	21,416,275	846,749
1919	...	72,086,575	41,850,536	24,997,649	45,993,417	6,882,568

The trade development of Manchuria in recent years was to a large measure due to the favourable trend of the times, but at the same time it is clear that, without aid given to it by strong financial organs, the development could hardly have been so great, and in this the Bank of Chosen rendered greater services than any other bank in the land.

(c) Exchange: In this line, too, the Bank of Chosen has made great progress as shown in the following table:

Year		Drafts		Collection	
		Issued	Paid	Bills Sent	Bills Received
		Yen	Yen	Yen	Yen
1909 2nd half	...	128,962	98,810	2,570	83,679
1910 1st "	...	673,538	404,118	26,208	496,798
" 2nd "	...	989,626	609,933	25,842	527,114
1911 1st "	...	669,428	512,719	43,818	474,249
" 2nd "	...	827,402	466,524	91,098	615,211
1912 1st "	...	895,465	1,007,608	230,774	649,572
" 2nd "	...	814,565	1,292,417	396,091	791,876

Year		Drafts		Collection		
		Issued	Paid	Bills Sent	Bills Received	
		Yen	Yen	Yen	Yen	
1913	1st half	...	825,675	721,455	763,890	609,332
"	2nd "	...	4,798,485	3,215,638	3,576,192	2,287,403
1914	1st "	...	7,129,733	6,433,799	6,304,862	2,841,784
"	2nd "	...	9,099,700	7,838,954	4,198,079	2,319,605
1915	1st "	...	13,800,812	9,775,474	11,934,723	3,014,897
"	2nd "	...	11,614,490	10,886,323	5,499,637	3,315,303
1916	1st "	...	16,459,180	12,187,631	11,630,465	4,371,420
"	2nd "	...	35,835,831	25,053,812	10,416,138	6,419,705
1917	1st "	...	43,086,239	37,673,208	17,710,363	10,965,840
"	2nd "	...	85,060,552	87,622,562	16,549,138	19,192,689
1918	1st "	...	124,555,716	114,302,996	16,933,994	21,493,198
"	2nd "	...	218,745,075	187,525,060	18,285,197	26,212,486
1919	1st "	...	276,176,048	238,910,441	5,458,369	33,317,587
"	2nd "	...	312,762,718	310,749,356	7,031,454	59,882,339

The Bank of Chosen and Gold Currency.—Along with the growth of Japanese and Russian influence, gold currency has constantly been gaining ground in Manchuria. How in the North the Russian rouble, which is on a gold basis, has supplanted the native currency has been described. In South Manchuria, the first gold currency used was represented by the Bank of Japan notes. Both the Kwantung¹ Government and the South Manchuria Railway Company have made gold the basis of their accounts, and this, together with the growth of the Japanese colonies there, made the amount of the Bank of Japan notes in circulation in Manchuria once reach a considerable amount, though we have no available data to substantiate our assertion. But the honour of having given the greatest

¹ I Kwantung (關東).

impetus to the circulation of gold currency in Manchuria must be given to the Bank of Chosen. The Yokohama Specie Bank had been doing business there a long time before the Bank had anything to do with it, but this bank, issuing silver notes, had rather been known as the supporter of silver currency, though at a later period (1913) it, too, issued a gold note convertible into gold coin or the Bank of Japan notes. The Bank of Chosen has always been a staunch believer in the gold principle, and probably is the only bank in Manchuria by which not a single silver note has ever been issued, and at no time silver accounts in any form been kept. When, therefore, the central authorities in Japan saw the wisdom of unifying the gold currency in Manchuria, they wisely decided that the Bank of Chosen notes should be made the sole legal tender under their jurisdiction there, and this decision was given expression in the Imperial Decrees 217 and 218, the former bestowing upon the notes the unrestricted *cours forcé*, and the latter abolishing this privilege already conferred upon the Yokohama Specie Bank gold-notes. Accordingly the Yokohama Specie Bank gold-notes amounting to Yen 4,538,340 were transferred to the Bank to be replaced by the latter's notes as quickly as possible. All this augured well for the fortune of gold money, for since then its circulation in the form of the Bank of Chosen notes has increased by leaps and bounds. With all the confusion in currency prevailing around, Kwantung¹ Province and the South Manchuria Railway Zone have enjoyed a currency régime as perfect as anywhere else.

¹ Kwantung (關東).

The following table in which receipts and payments in silver of the three largest Japanese banks there, viz., the Bank of Chosen, the Yokohama Specie Bank and the Shor-ryu Bank, are compared with those in gold will show how growing is the influence of the gold currency in Manchuria.

Silver						
Year	Military Notes		Silver Notes	Yen Silver	Total	
		Yen	Yen	Yen	Yen	
1911	353,061	202,920,044	1,252,440	204,525,545
1912	88,796	376,887,069	794,914	377,770,779
1913	189,318	442,381,101	744,642	443,315,061
1914	1,894,584	531,294,396	1,581,218	534,770,198
1915	2,505,354	586,053,031	1,809,825	590,368,210
1916	286,043	931,048,830	1,654,867	932,989,740
1917	62,876	1,101,619,157	1,137,393	1,102,819,426

Gold						
Year	Gold Notes, and Their Subsidiary Coins		Total	Percentage		
		Yen		Silver	Gold	
		Yen	Yen	%	%	
1911	151,105,497	355,630,952	57.5	42.5
1912	331,431,868	701,202,647	53.2	46.8
1913	490,361,623	933,676,684	47.5	52.5
1914	650,775,537	1,185,545,735	45.1	54.9
1915	709,835,870	1,300,204,030	45.4	54.6
1916	1,253,283,039	2,186,272,779	42.7	57.3
1917	2,398,207,793	3,501,027,219	31.5	68.5

The above table will show that, in the volume of transactions, both silver and gold increased, but while the former increased five-fold, the latter expanded fifteen-fold, resulting in a complete change in their relative positions. Seven years ago more transactions were made in silver, but at present just the reverse is the case.

How much, then, of the Bank of Chosen notes is now in circulation in Manchuria? This is the question often asked, but, strange to say, is the one which the Bank authorities themselves can hardly answer with any certainty. For the Bank of Chosen notes in Manchuria consist not only of those issued by the branch offices of the Bank there, but of those which have flowed into it from Chosen. It is also possible that those issued in Manchuria are carried into Chosen, thus making it impossible to determine how much of the total issue of the Bank of Chosen notes, which amounted to about 160 million yen at the end of 1919, is in circulation in Chosen and how much in Manchuria. Their circulation in South Manchuria in 1918 was estimated by the Kwantung¹ Government as follows :

Date				Amount Issued	Amount in Bank and Treasury	Circulation
				Yen	Yen	Yen
July 30, 1918	...	...	...	12,458,630	2,274,228	10,184,402
Nov. 30, 1918	...	...	...	21,958,057	2,868,674	19,089,382

It is clear that their circulation is much greater now, and is probably over 30 million yen.

Moreover, the loss of credit by the rouble note, in consequence of the anarchical condition prevailing in Russia, and Siberia, opened the way for the notes into North Manchuria, and a large amount of them is now seen in circulation there.

¹ Kwantung (關東).

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大正九年九月十一日印刷
大正九年九月十四日發行
大正十年二月十日再版

朝鮮銀行

朝鮮京城中心洞三二四番地
著者 星野德治

橫濱市太田町五丁目八十七番地
印刷者 村岡平吉

橫濱市山下町百〇四番地
印刷所 福音印刷合資會社

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Title Hoashino, T.

Economic history of Manchuria.

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